AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE	OF PAGES
	N/A	1	70

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0002	SEP. 03, 2004	N/A	SPEC. NO. 1406

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
DEPARTMENT OF THE ARMY U.S. ARMY ENGINEER DISTRICT, SACRAMENTO SACRAMENTO, CALIFORNIA 95814-2922		DEPARTMENT OF THE ARMY U.S. ARMY ENGINEER DISTRICT, SACRAMENTO SACRAMENTO, CALIFORNIA 95814-2922	

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*	(√)	9A. AMENDMENT OF SOLICITATION NO.
	X	W91238-04-B00007
		9B. DATED *(SEE ITEM 11)* AUG. 12 , 2004
		10A. MODIFICATION OF CONTRACTS/ORDER NO. N/A
		10B. DATED *(SEE ITEM 13)* N/A
CODE FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
N/A

NOTE: ITEM 13 BELOW IS N/A.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(√)	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. N/A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)* N/A

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

California Army National Guard (CAARNG)
Readiness Center
Lancaster, California

2 Encl.

1. Revised Pages: List of Drawing and Specification Revisions, Pricing Schedule(page;1,4), Attachment No. 5 -Appendix D(page;D-2), 02230-1,02260-1,02300-1,02300-3,02741-8,02751-6,033000-4,03470-3,05310-1,08110-3,08331-5,08411-4,09260-3,09310-2, 09310-3,09511-4,09511-5,09680-1,09912-2,10200-3,10505-6,15515-6,15839-2,15839-3,15900-3,15900-5
2. Revised Drawings:T000,C101,C102,C103,C110,A004,A005,A212,S100,S101,S110,S111,S211,S220,S230,S240,S250,S300,S301, S302,S303,S306,S410,S412,S413,S414,S416,M602,E002,E003,E100,E221,E312,E530,E801

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY *(Signature of Contracting Officer)*	16C. DATE SIGNED

LANCASTER READINESS CENTER
REVISED DRAWINGS & SUMMARY OF CHANGES
(Amendment #2, 08-31-04)

Sheet	Drawing Title	Summary of Changes
T000	Cover Sheet, Vicinity and Location Maps	Added note to location map
A004	Symbols and Abbreviations	Added C.O.R. to the abbreviation list
A005	Room Finish Schedule	Revised ceramic tile pattern CT-1 and CT-2
A212	Enlarged First Floor Plan Sector 2	Added spec. to keynote 22
08110	Steel Doors and Frames	Revised Part 2.5 (B)
08331	Overhead Coiling Doors	Revised Part 2.2 (A)
08411	Aluminum Glass Curtain, Walls and Storefront	Revised Part 2.2 (A.1)
09260	Gypsum Bond Assemblies	Revised Part 2.2 (D.1)
09310	Ceramic Tile	Revised Part 2.1 (B & C) and (F.1)
09511	Acoustical Panel Ceilings	Revised Part 2.7 (A.1); added 2.7(D)
09680	Carpet	Revised Part 1.2 (A)
09912	Painting	Revised Part 2.1 (C.2, 4)
10200	Louvers and Vents	Revised Part 2.5 (A.1)
10505	Metal Lockers	Revised Part 2.3 (L.1)
12361	Metal Workbenches	Deleted entire section

LANCASTER READINESS CENTER
REVISED DRAWINGS & SUMMARY OF CHANGES
(Amendment #2, 08-31-04)

Sheet	Drawing Title	Summary of Changes
E002	Electrical Overall Single Line Diagram	Added keynote 3 & 4
E003	Electrical 480V MCC Single Line Diagram	Issued for construction
E100	Electrical Site Plan	Added fuel pump on site plan
E221	Electrical Second Floor Plan Sector 1 Lighting Plan	Revised keynote 1
E312	Electrical First Floor Sector 2 Power Plan	Revised detail callout
E530	Electrical Roof Fire Alarm Plan	Revised keynote 1
E801	Electrical Lighting Fixture Schedule	Revised lighting fixture schedule types T & AAA remarks Deleted type U

LANCASTER READINESS CENTER
REVISED DRAWINGS & SUMMARY OF CHANGES
(Amendment #2, 08-31-04)

Sheet	Drawing Title	Summary of Changes
M602	Mechanical Schedules	Revised EF 15
P241	Plumbing Unheated Storage Building	Removed from drawing set
15515	Water-Tube Boilers	Added Part 2.10 A
15839	Vehicle Exhaust Removal System	Revised Part 2.2 (B); Deleted Part 2.2 E, F, and G; Rename H and I to E and F
15900	HVAC Instrumentation and Controls	Added Part 1.5 (G); 2.2 A and revised 2.2 (B.1.h)

LANCASTER READINESS CENTER
REVISED DRAWINGS & SUMMARY OF CHANGES
(Amendment #2, 08-31-04)

Sheet	Drawing Title	Summary of Changes
S100	General Notes	Added reinforced concrete note # 16; Deleted structural and misc. steel note # 17; revised precast conc. Panels note #12; revised metal building note #1
S101	Abbreviations and Legends	Deleted moment connection symbol
S110	Enlarged Site Foundation Plans and Panel Elevations	Revised detail callouts and added section x-x on detail 5
S111	Canopies Framing Plans and Details	Revised details # 1, 4, 6, 7, 8, 10 and 11
S211	Storage Building Foundation Plan	Revised plan A notes and detail # 2; Revised foundation notes # 1
S220	Overall Second Floor Framing Plan	Revised detail callouts; added note on steel deck; revised framing note # 5; Deleted note C
S230	Overall Low Roof Framing Plan	Deleted metal deck note D, roof framing note D; and 9; revised # 10 to new # 9; revised truss to beam at column grid E near column grid 3
S240	Overall High Roof Framing Plan	Deleted metal deck note E, roof framing note # 9; revised note D and # 7; revised misc. notes on framing plan; added subframing on plan
S250	Enlarged Partial High Roof Framing Plan	Deleted note C and 5 Renumbered 6 to 5
S300	Typical Wall Panel Details	Added note # 14; deleted detail H callout
S301	Wall Panel Elevation	C12 notated at panel 2 elevation; Added panel 25 connection

S302	Wall Panel Elevation	Revised a detail callout
S303	Wall Panel Elevation	Revised two detail callouts
S306	Wall Panel Elevation	Revised panel dimensions
S410	Structural Details	Added dimension on detail #3; Revised detail callouts in detail #16
S412	Structural Details	Detail #3 added weld symbol & revised note
S413	Structural Details	Detail #2 and 7 added note; Detail #9 and 13 deleted note; Detail #14 revised note; Detail #16 & 18 revised detail callout
S414	Structural Details	Detail #2 and 3 revised detail callout; Detail #7 added dimension; Detail #9 and 17 revised note; Detail #14 deleted note; Revised detail #19
S416	Stairs 1, 2, & Roof Access Enclosed Plans & Sections	Revised note in detail # 3 and 5, revised enlarged plan # 8, 9, 10, 11 and 12
03300	Cast-In-Place Concrete	Revised Part 2.2 (F.2)
03470	Tilt-up precast concrete	Revised Part 2.1 (B)
05310	Steel Deck	Add Part 1.2 (2)

PRICING SCHEDULE

CONTRACTOR SHALL FURNISH ALL PLANT, LABOR, MATERIAL, EQUIPMENT, ETC. NECESSARY TO PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH IN THE CONTRACT TO INCLUDE ALL ATTACHMENTS THERETO.

LINE ITEM NO.	DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	TOTAL PRICE
0001	MAIN BUILDING & CONTROLLED WASTE/ FLAMMABLE MATERIAL STORAGE	1	JOB	LUMP SUM	$_____
0002	SITE PREPARATION				
0002AA	CLEARING & GRUBBING	1	JOB	LUMP SUM	$_____
0002AB	PAD OVER-EXCAVATION, COMPACTION	1	JOB	LUMP SUM	$_____
0002AC	IMPORT FILL, COMPACT, GRADE	1	JOB	LUMP SUM	$_____
0003	PARKING AND ACCESS ROADS				
0003AA	GOV. PARKING & ACCESS ROADS	1	JOB	LUMP SUM	$_____
0003AB	POV/VISITOR PARKING & ACCESS ROADS	1	JOB	LUMP SUM	$_____
0004	UTILITY CONNECTIONS				
0004AA	WATER	1	JOB	LUMP SUM	$_____
0004AB	SEWER	1	JOB	LUMP SUM	$_____
0004AC	NATURAL GAS	1	JOB	LUMP SUM	$_____
0004AD	SUBSURFACE STORM DRAINAGE	1	JOB	LUMP SUM	$_____
0004AE	POWER/LIGHTING	1	JOB	LUMP SUM	$_____
0004AF	DATA/TELEPHONE ***(EXT. COND. & CABLE)***	1	JOB	LUMP SUM	$_____
0005	SITE IMPROVEMENTS				
0005AA	CHAIN-LINK FENCE AROUND GOV. AREA	1	JOB	LUMP SUM	$_____
0005AB	WALKWAYS	1	JOB	LUMP SUM	$_____
0005AC	CHAIN-LINK FENCE AROUND POV AREA	1	JOB	LUMP SUM	$_____
0005AD	LANDSCAPING	1	JOB	LUMP SUM	$_____
0005AE	SITE ACCESSORIES, TRASH, ENCL., EQUIP. ENCL., MAILBOX, FLAGPOLE, Signage, etc.,	1	JOB	LUMP SUM	$_____

BID OPTIONS

(f) Line Item 0006 - (Bid Option #1) - Rigid (Concrete) Paving in ***GOV parking area: The base bid scope for paving the GOV parking area provides 6 inches of aggregate base. This BOI provides 6 inches of broom finished concrete over that base. Concrete shall be per geotechnical report.***

(g) Line Item 0007 - (Bid Option #2) - Landscaping: This BOI provides site landscaping as indicated on sheets L001 thru L501.

(h) Line Item 0008 - (Bid Option #3) - Unheated Storage Building: All work in connection with the construction of Unheated Storage Building, including excavation and backfilling for foundation walls and footings, finish shaping, and proof rolling sub-grade material, and the gravel drainage fill under the floor slabs. Utility work will include the installation of all systems within the building and extended to a point 5'-0" outside the building. If this Bid Option Item is selected, the Controlled Waste/Flammable Storage Unit (which is part of the base bid) shall be considered part of this building (immediately adjacent), but shall not be included in the pricing of this Bid Option Item.

(i) Line Item 0009 - (Bid Option #4)Covered Wash Area: Shall include the concrete slab on grade, water supply, catch basin and metal cover. Base bid shall include the oil/water separator.

(j) Line Item 0010 - (Bid Option #5)Fuel System: All work in connection with furnishing and installation of fuel system equipment as shown on detail 1 on sheet C112. The supplier of the pumps shall furnish all information associated with proper installation of the tanks, pumps and piping and power connections for fueling equipment as part of pricing for the equipment and installation. Bid items include (but are not limited to): conduit and wire for power to the fueling area, concrete work (equipment pads, containment, island, curbs), hose bibs, water piping, drainage, and bollards.

(k) Line Item 0011 – (Bid Option #6)Other Furnishing: All work in connection with providing and installing marker boards, tack boards and projection screens in rooms 1212, 1216, 1217, 1218, 1219, 1224 and 1225.

(l) Line Item 0012 - (Bid Option #7) Folding Partitions: All work in association with the folding partitions separating rooms 1216 and 1217 and rooms 1218 and 1219.

(m) Line Item 0013 – (Bid Option #8)Lockers and Benches: All work in connection with furnishing and installing lockers and benches in Rooms 1135, 1138, 1106 and 1113.

(n) Line Item 0014 - (Bid Option #9)Food Service Equipment: All work in connection with furnishing and installing kitchen equipment as described on sheet A630, P630, and E305. Plumbing and Electrical required to support this equipment is part of the base bid scope.

2.11 **Moisture Content (MC):** is the ratio of the weight of water to the weight of the dry solid material expressed as a percentage and determined by ASTM D2216, D3017 or the method approved by the engineer.

2.12 **Field Dry Density (FDD):** is the dry density of natural or compacted material as determined by ASTM D1556 - Sand Cone Method or ASTM D2922 - Nuclear Methods or ASTM D2937 - Drive-Cylinder Method.

2.13 **Relative Compaction**: is the ratio of the field dry density to the maximum dry density, expressed as a percentage.

3.0 GENERAL NOTES

~~3.1 The Owner shall retain the Soil Engineer for quality assurance and testing services.~~

3.2 The Contractor shall be responsible for quality control through out the prosecution of the work.

3.3 Contractor shall visit the project site and become familiar with the site conditions prior to the bidding.

3.4 Contractor shall verify the site and subsurface conditions at no cost to the owner. The preliminary soil engineering report does not constitute the actual subsurface conditions at the time of constructions or at the locations different from the excavated test pits/borings.

3.5 All excavations and foundations for the structures shall be inspected and approved by the soil engineer, prior to the preparations of subgrade, and backfill.

3.6 All foundation soils underneath the retaining wall footings shall be scarified to a depth of at least one (1') foot, brought to uniform moisture content near optimum moisture content and recompacted to a minimum relative compaction of 95% and as specified in the report.

4.0 FIELD OBSERVATIONS AND TESTING

Field observations and testing shall be performed by an experienced and qualified engineer (civil engineer, geotechnical engineer and their representatives). The engineer will observe and perform adequate amount of testing to meet the project and regulatory requirements. It will be the contractor's responsibility to assist the engineer, allow sufficient time and provide adequate notice to carry out the testing and schedule the personnel.

5.0 PREPARATION OF FILL AREAS

5.1 **Clearing, Overexcavation and Recompaction**: All areas receiving fill and used as foundation support shall be cleared of topsoil, vegetation, trash, debris and other deleterious materials. After clearing and grubbing, the over excavating, as stated in the preliminary geotechnical report, the area should be scarified as recommended in the report or to a minimum depth of 12 inches.

SECTION 02230 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Removing trees and other vegetation.
   2. Clearing and grubbing.
   3. Topsoil stripping.
   4. Removing above-grade site improvements.
   5. Disconnecting, capping or sealing, and abandoning site utilities in place.
   6. Disconnecting, capping or sealing, and removing site utilities.

B. Related Sections include the following:
   1. Division 1 Section 01500, "Temporary Construction Facilities" for temporary utilities, temporary construction and support facilities, temporary security and protection facilities, and environmental protection measures during site operations.
   2. Division 2 Section 02300, "Earthwork" for soil materials, excavating, backfilling, and site grading.

1.2 DEFINITIONS

A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.

1.3 MATERIALS OWNERSHIP

A. Except for materials indicated to be stockpiled or to remain Government's property, cleared materials shall become Contractor's property and shall be removed from the site.

1.4 SUBMITTALS

A. Submit the following in accordance with Section 01330, "Submittal Procedures."

B. Construction Photos or Video, sufficiently detailed, of existing conditions of trees and plantings, adjoining construction, and site improvements that might be misconstrued as damage caused by site clearing.

SECTION 02260 - EXCAVATION SUPPORT AND PROTECTION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes temporary excavation support and protection systems.

B. Related Sections include the following:
   1. Division 1 Section 01500, "Temporary Facilities and Controls" for temporary utilities and support facilities.
   2. Division 2 Section 02300, "Earthwork" for excavating and backfilling and for existing utilities.

1.2 PERFORMANCE REQUIREMENTS

A. Design, furnish, install, monitor, and maintain excavation support and protection system capable of supporting excavation sidewalls and of resisting soil and hydrostatic pressure and superimposed and construction loads.
   1. Provide professional engineering services needed to assume engineering responsibility, including preparation of Shop Drawings and a comprehensive engineering analysis by a qualified professional engineer.
   2. Prevent surface water from entering excavations by grading, dikes, or other means.
   3. Install excavation support and protection systems without damaging existing buildings, pavements, and other improvements adjacent to excavation.

1.3 SUBMITTALS

A. Submit the following in accordance with Section 01330, "Submittal Procedures."

B. Shop Drawings for Information: Prepared by or under the supervision of a qualified professional engineer for excavation support and protection systems.
   1. Include Shop Drawings signed and sealed by the qualified professional engineer responsible for their preparation.

C. Qualification Data: For Installer and professional engineer.

D. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by the absence of, the installation of, or the performance of excavation support and protection systems.

SECTION 02300 - EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Preparing subgrades for slabs-on-grade, walks, pavements, lawns, and plantings.
   2. Excavating and backfilling for buildings and structures.
   3. Base course for asphalt paving.
   4. Subsurface drainage backfill for walls and trenches.
   5. Excavating and backfilling trenches within building lines.
   6. Excavating and backfilling trenches for buried mechanical and electrical utilities and pits for buried utility structures.

B. Related Sections include the following:
   1. Division 1 Section 01270 "Unit Prices" for a schedule of unit prices.
   2. Division 1 Section 01500 " Temporary Construction Facilities."
   3. Division 2 Section 02230, "Site Clearing" for site stripping, grubbing, removing topsoil, and protecting trees to remain.
   4. Division 2 Section 02260, "Excavation Support and Protection."
   5. Division 3 Section 03300, "Cast-in-Place Concrete" for granular course over vapor retarder.
   6. Division 15 and 16 Sections for excavating and backfilling buried mechanical and electrical utilities and buried utility structures.

1.2 DEFINITIONS

A. Backfill: Soil materials used to fill an excavation.
   1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
   2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Layer placed between the subbase course and asphalt paving.

C. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.

C. Samples: For the following:
   1. 30-lb samples, sealed in airtight containers, of each proposed soil material from on-site or borrow sources.
   2. 12-by-12-inch sample of drainage fabric.
   3. 12-by-12-inch sample of separation fabric.

D. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated:
   1. Classification according to ASTM D 2487 of each on-site or borrow soil material proposed for fill and backfill.
   2. Laboratory compaction curve according to ASTM D 1557 for each on-site or borrow soil material proposed for fill and backfill.

1.4 QUALITY ASSURANCE

A. Geotechnical Testing Agency Qualifications: An independent testing agency qualified according to ASTM E 329 to conduct soil materials and rock-definition testing, as documented according to ASTM D 3740 and ASTM E 548.

B. Preexcavation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section 01310, "Project Management and Coordination."

1.5 PROJECT CONDITIONS

A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Government or others unless permitted in writing by COR and then only after arranging to provide temporary utility services according to requirements indicated:
   1. Notify COR not less than two days in advance of proposed utility interruptions.
   2. Do not proceed with utility interruptions without COR's written permission.
   3. Contact utility-locator service for area where Project is located before excavating.

B. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies to shut off services if lines are active.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.

b. Field density of in-place compacted pavement may also be determined by nuclear method according to ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.

F. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.9 DISPOSAL

A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.
1. Do not allow excavated materials to accumulate on-site.

3.10 SURFACE TREATMENTS

A. Fog Seals: Apply 2 coats of fog seal at a rate of 0.10 tp 0.15 gal./sq. yd. each to the asphalt pavement and allow to cure. With a fine sand, lightly dust areas receiving excess fog seal.

END OF SECTION 02741

C. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.

D. Pavement-Marking Paint: Latex, water-base emulsion; ready mixed; complying with FS TT-P-1952.
   1. Color: As indicated.

E. Glass Beads: AASHTO M 247.

2.7 CONCRETE MIXES

A. Prepare design mixes, proportioned according to ACI 211.1 and ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.

B. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the trial batch method.

C. Proportion mixes to provide concrete with the following properties:
   1. Compressive Strength (28 Days): 3000 psi .
   2. Slump Limit: 4 inches .
      a. Slump Limit for Concrete Containing High-Range Water-Reducing Admixture: Not more than 8 inches after adding admixture to plant- or site-verified, 2- to 3-inch slump.

D. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.

E. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
   1. Fly Ash: **15 percent minimum**.
   2. Combined Fly Ash and Pozzolan: 25 percent.

F. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content of 2.5 to 4.5 percent.

2.8 CONCRETE MIXING

A. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94.

B. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94 and ASTM C 1116.

	(psi)	Size (inch)	(Inch)
Slabs-on-Grade	4,000	1	3
Foundations	3,000	1-1/2	3
Tilt-up-wall Panels	3,000 (min)	1	4
Structural Light wt	3,000	¾	4
Others	3,500	1	4

F. Integral Color Admixture:
   1. Sidewalk: Davis Color or approved equal.
   2. Color: CONC-2 and CONC-1. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**
   3. Pattern: As indicated on drawings.

PART 3 - EXECUTION

3.1 FORMWORK

A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until concrete structure can support such loads.

B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

C. Limit concrete surface irregularities, designated by ACI 347R as abrupt or gradual, as follows:
   1. Class A, 1/8 inch.
   2. Class B, 1/4 inch.
   3. Class C, 1/2 inch.
   4. Class D, 1 inch.

D. Construct forms tight enough to prevent loss of concrete mortar.

E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical. Kerf wood inserts for forming keyways, reglets, recesses, and the like, for easy removal.
   1. Do not use rust-stained steel form-facing material.

F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

PART 2 - PRODUCTS

2.1 CONCRETE MIXES

A. Normal-Weight Concrete: Proportion normal-weight concrete mix as follows:
   1. Compressive Strength (28 Days): 3,000 psi min. (See Structural Drawings).

B. Integral Color Admixture: Davis Colors or approved equal. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**

2.2 MANUFACTURED ITEMS

A. Lifting hardware, inserts, braces, and related embedded and attached items shall be manufactured specifically for tilt-up construction.

2.3 FORMS

A. Panel boundary forms shall be rigidly constructed and well braced steel or wood forms, straight and with precise corners. Design to withstand stresses resulting from the casting process. Consideration should be given to exposed formed surfaces.

B. Forms shall contain reveals, block-outs required to provide openings detailed on Drawings.

C. Panels may be stacked for ease of casting, in forms as specified above.

D. Bondbreaker must be compatible with curing compound and other finishes, including paint, and with floor finish.

2.4 FORM LINERS

A. Basis of Design: Fitzgerald Formliners or approved equal.

B. Pattern: 17942, March Lane, "V" Wave, Vac-U-Form.

C. Size: 96 inches (wide) x 48 inches (high) x 1 inches (depth).

PART 3 - EXECUTION

3.1 FORMS

A. Construct and brace formwork so tilt-up precast concrete panels are of size, shape, alignment, elevation, and position indicated.

SECTION 05310 - STEEL DECK

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Roof deck.
   2. Acoustical roof deck.
   3. Composite floor deck.

B. Related Sections include the following:
   1. Division 3 Section 03300, "Cast-in-Place Concrete" for concrete fill and reinforcing steel.
   2. Division 5 Section 05120, "Structural Steel" for shop-welded shear connectors.
   3. Division 5 Section 05500, "Metal Fabrications" for framing deck openings with miscellaneous steel shapes.
   4. Division 7 Section 07811, "Sprayed Fire-Resistive Materials" for protection of structural members.

1.2 SUBMITTALS

1. Product data on acoustical roof deck.
2. **Shoring plan to be approved by the Contracting Officer Representative (COR).**

PART 2 - PRODUCTS

2.1 MATERIALS

A. Steel roof deck and perforated acoustical roof deck.

B. Steel floor deck.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine supporting frame and field conditions for compliance with requirements for installation tolerances and other conditions affecting performance.

J. Frame Construction:

1. Fabricate frames with mitered or coped and continuously welded corners and seamless face joints. Provide temporary spreader bars.
2. Fabricate knock-down, drywall slip-on frames for in-place gypsum board partitions.

K. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied hardware may be done at Project site.

L. Locate hardware as indicated or, if not indicated, according to ANSI A250.8.

M. Glazing Stops: Manufacturer's standard, formed from 0.032-inch-thick steel sheet.

1. Provide nonremovable stops on outside of exterior doors and on secure side of interior doors for glass, louvers, and other panels in doors.
2. Provide screw-applied, removable, glazing stops on inside of glass, louvers, and other panels in doors.

N. Astragals: As required by NFPA 80 to provide fire ratings indicated.

2.5 FINISHES

A. Prime Finish: Manufacturer's standard, factory-applied coat of rust-inhibiting primer complying with ANSI A250.10 for acceptance criteria.

B. Field Paint: **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**

PART 3 - EXECUTION

3.1 INSTALLATION

A. Placing Frames: Comply with provisions in SDI 105, unless otherwise indicated. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is completed, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.

1. Wall Anchors: Provide at least three anchors per jamb. For openings 90 inches or more in height, install an additional anchor at hinge and strike jambs.
2. Gypsum Board Partitions: For in-place partitions, install drywall slip-on frames.
3. Fire-Rated Frames: Install according to NFPA 80.

B. Door Installation: Comply with ANSI A250.8. Shim as necessary to comply with SDI 122 and ANSI/DHI A115.1G.

1. Fire-Rated Doors: Install within clearances specified in NFPA 80.

2. Door-Operator Type: Wall-, hood-, or bracket-mounted unit with electric motor, belt-reduction drive, and chain and sprocket secondary drive.
3. Through-wall-mounted motor operator.

T. Electric Motors: High-starting torque, reversible, continuous-duty Class A insulated, electric motors complying with NEMA MG 1; with overload protection; sized to start, accelerate, and operate door in either direction from any position, at not less than 2/3 fps and not more than 1 fps, without exceeding nameplate ratings or service factor. Coordinate wiring requirements and electrical characteristics of motors with building electrical system.

1. Open dripproof-type motor, and controller with NEMA ICS 6, Type 1 enclosure.
2. Totally enclosed, nonventilated or fan-cooled motor, fitted with plugged drain, and controller with NEMA ICS 6, Type 4 enclosure where indicated.

U. Control Equipment: NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6, with NFPA 70 Class 2 control circuit, maximum 24-V, ac or dc, with remote, three-button control station.

1. Interior units, full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
2. Exterior units, full-guarded, surface-mounted, standard-duty, weatherproof type, NEMA ICS 6, Type 4 enclosure, key operated.
3. Obstruction Detection Device: External automatic safety sensor capable of protecting full width of door opening. Activation of sensor immediately stops and reverses downward door travel.
4. Provide electric operators with ADA-compliant audible alarm and visual indicator lights.

2.2 FINISHES

A. Galvanized Steel Finish:

1. Color and Gloss: Kynar 500. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Install coiling doors and operating equipment complete with necessary hardware, jamb and head molding strips, anchors, inserts, hangers, and equipment supports

1. Install fire-rated doors to comply with NFPA 80.

e. Water leakage through fixed glazing and framing areas.
f. Failure of operating components to function properly.

2. Warranty Period: Two years from date of Substantial Completion.

B. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components on which finishes fail within specified warranty period. Warranty does not include normal weathering.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

1. Sheet and Plate: ASTM B 209 (ASTM B 209M).
2. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221 (ASTM B 221M).
3. Extruded Structural Pipe and Tubes: ASTM B 429.
4. Structural Profiles: ASTM B 308/B 308M.

B. Steel Reinforcement: With manufacturer's standard corrosion-resistant primer.
1. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M.
2. Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M.
3. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M.

2.2 FRAMING SYSTEMS

A. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads.

1. Color: Kynar 500. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**

B. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.

C. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.
1. Where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration, use self-locking devices.
2. Reinforce members as required to receive fastener threads.
3. Use exposed fasteners with countersunk Phillips screw heads, finished to match framing system.

4. Firestop Track: Top runner manufactured to allow partition heads to expand and contract with movement of the structure while maintaining continuity of fire-resistance-rated assembly indicated; in thickness not less than indicated for studs and in width to accommodate depth of studs.

5. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width indicated.

   a. Minimum Base Metal Thickness: 0.0179 inch.

6. Cold-Rolled Channel Bridging: 0.0538-inch bare steel thickness, with minimum 1/2-inch-wide flange, and in depth indicated.

   a. Clip Angle: 1-1/2 by 1-1/2 inch, 0.068-inch-thick, galvanized steel.

7. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

2.2 PANEL PRODUCTS

A. Panel Size, General: Provide in maximum lengths and widths available that will minimize joints in each area and correspond with support system indicated.

B. Gypsum Wallboard: ASTM C 36.

   1. Type X: In thickness indicated and with long edges tapered.

C. Sag-Resistant Gypsum Wallboard: ASTM C 36, manufactured to have more sag resistance than regular-type gypsum board, 1/2 inch thick, and with long edges tapered. Apply on ceiling surfaces.

D. Tile Backing Panels:

   1. **Moisture**-Resistant Gypsum Backing Board: ASTM C 630/C 630M, with core type and in thickness indicated.

   2. Cementitious Backer Units: ANSI A118.9, in thickness indicated.

2.3 TRIM ACCESSORIES

A. Interior Trim: ASTM C 1047.

   1. Cornerbead: Use at outside corners, unless otherwise indicated.
   2. LC-Bead: Use at exposed panel edges.
   3. L-Bead: Use where indicated.
   4. U-Bead: Use where indicated.

PART 2 - PRODUCTS

2.1 TILE

A. ANSI Ceramic Tile Standard: Provide Standard grade tile that complies with ANSI A137.1, "Specifications for Ceramic Tile," for types, compositions, and other characteristics indicated.

B. Ceramic Floor Tile CT-1: Factory-mounted flat tile as follows:
1. Composition: Porcelain.
2. Module Size: 2 by 2 inches (CT-1).
3. Thickness: 1/4 inch.
4. **Coeficient of Friction: 0.6 minimum.**
5. Finish: Matt.
6. Color: **To be selected from manufacture full range by the Contracting Officer Representive (COR).**
7. Grout: **To be selected from manufacture full range by the Contracting Officer Representive (COR).**

C. Quarry Tile QT:
1. Size: 8 by 8 inches.
2. Thickness: 3/8 inch.
3. Color: Dal-Tile or approved equal – Ashen Gray (OT03).
4. Grout: Mapei or approved equal.

D. Glazed Wall Tile CT-2 and CT- 4: Flat tile, per TCA W244-03 Standard and as follows:
1. Module Size: 4-1/4 by 4-1/4 inches.
2. Thickness: 5/16 inch.
3. Face: Pattern of design indicated in Drawings, with manufacturer's standard edges.
4. Finish: Semi-gloss.
5. Mounting: Factory back-mounted.
6. Color: Dal-Tile, Field: White K101, Accent: Grape DH57 and Desert Gray X114 (CT-2) and Field: Almond 0135 Accent: Chamois K180 (CT-4).
7. Grout: Mapei or approved equal, #00, White/Blanc (CT-2 and CT-4).

E. Glazed Wall Tile Trim Units: Matching characteristics of adjoining flat tile and coordinated with sizes and coursing where applicable.
1. Base: Coved, module size 2 by 2 inches.
2. Wainscot Cap: Bullnose, module size 4-1/4 by 4-1/4 inches.
3. External Corners: Bullnose.
4. Internal Corners: Field-butted square corners except with coved base and cap angle pieces designed to fit with stretcher shapes.

F. Ceramic Trim Units: Matching characteristics of adjoining flat tile and coordinated with sizes and coursing where applicable.

1. Base Trim: Cove, module size 4-1/4 by 4-1/4 (CT-1) and **4** by **8** (CT-3).
2. Base Cap: Bullnose 2 by 2 inches.
3. External Corners: Bullnose, module size 2 by 1 inch.
4. Internal Corners: Cove.
5. Tapered Transition Tile: Shape designed to effect transition between thickness of tile floor and adjoining floor finishes of different thickness, tapered to provide reduction in thickness from 1/2 to 1/4 inch across nominal 4-inch dimension.

2.2 ACCESSORY MATERIALS

A. Thresholds: Fabricate to provide transition between adjacent floor finishes. Bevel edges at 1:2 slope, limit height of bevel to 1/2 inch or less, and finish bevel to match face of threshold.

1. Marble Thresholds: ASTM C 503 with a minimum abrasion resistance of 10 per ASTM C 1353 or ASTM C 241 and with honed finish.

a. Description: Uniform, fine- to medium-grained white stone with gray veining.

B. Waterproofing and Crack-Suppression Membranes for Thin-Set Tile Installations: Manufacturer's standard product that complies with ANSI A118.10 and Tile Council of America (TCA), F121-03 / F122-03.

2.3 SETTING AND GROUTING MATERIALS

A. Portland Cement Mortar (Thickset) Installation Materials: ANSI A108.1A.

B. Dry-Set Portland Cement Mortar (Thin Set): ANSI A118.1.

1. For wall applications, provide nonsagging mortar.

C. Latex-Portland Cement Mortar (Thin Set): ANSI A118.4.

1. Prepackaged dry-mortar mix containing dry additive to which only water must be added.
2. Prepackaged dry-mortar mix combined with liquid-latex additive.
3. For wall applications, provide nonsagging mortar.

D. Chemical-Resistant, Water-Cleanable, Tile-Setting and Grouting Epoxy: ANSI A118.3.

E. Water-Cleanable, Tile-Setting Epoxy Adhesive: ANSI A118.3.

F. Organic Adhesive: ANSI A136.1, Type I.

G. Standard Sanded Cement Grout: ANSI A118.6, color as indicated.

H. Standard Unsanded Cement Grout: ANSI A118.6, color as indicated.

2.4 ACOUSTICAL CEILING PANELS (SAT-3)

A. Basis of Design:

1. Armstrong-Dune, Angled Tegular # 1776 or approved equal.

B. Color: White.

C. Edge Detail: Square with curved edge as required.

D. Thickness: 5/8 inch.

E. Size: 24 by 48 inches.

2.5 ACOUSTICAL CEILING PANELS (SAT-4)

A. Basis of Design:

1. Armstrong Metalworks Vector, smooth textured with micro-perforated with acoustic fleece #9420U6A2WH or approved equal.

B. Color: Silver Gray (SG).

C. Edge Detail: Square.

D. Thickness: 5/16 inch.

E. Size: 24 by 24 inches.

2.6 METAL SUSPENSION SYSTEM

A. Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet, prepainted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 (Z90) coating designation, with prefinished 15/16-inch-wide metal caps on flanges.

1. Structural Classification: Intermediate-duty system.
2. End Condition of Cross Runners: Override type.
3. Cap Material: Steel or aluminum cold-rolled sheet.
4. Cap Finish: White for SAT-1, SAT-2, SAT-3 and Silver Gray for SAT-4.

2.7 ACOUSTICAL WALL PANELS (AWP-1)

A. Basis of Design:
1. Armstrong acoustical wall panel or approved equal with Koreseal fabric: Inspiration series, **Prestige** Granite #14-09.

B. Size: 48 by 96 inches.

C. Thickness: 1 inch.

D. Flame Spread: Class A.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Install acoustical panel ceilings to comply with ASTM C 636, UBC Standard 25-2 and seismic requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."

B. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width tiles at borders.

C. Suspend ceiling hangers from building's structural members, plumb and free from contact with insulation or other objects within ceiling plenum. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, counter-splaying, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers, use trapezes or equivalent devices.

1. Do not support ceilings directly from permanent metal forms or floor deck; anchor into concrete slabs.
2. Do not attach hangers to steel deck tabs or to steel roof deck.

D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate with concealed fasteners at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet. Miter corners accurately and connect securely.

E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

END OF SECTION 09511

SECTION 09680 - CARPET TILE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes woven and tufted carpet.

1.2 SUBMITTALS

A. Product Data: For each product indicated**, including information showing that the product passed AATCC 107 – 2002 colorfastness to water**.

B. Samples: For each carpet and exposed accessory and for each color and pattern required.

C. Maintenance data.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: A qualified installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Comply with CRI 104, Section 5, "Storage and Handling."

1.5 PROJECT CONDITIONS

A. General: Comply with CRI 104, Section 6.1, "Site Conditions; Temperature and Humidity."

B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

C. Do not install carpet over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by manufacturer.

D. Where demountable partitions or other items are indicated for installation on top of carpet, install carpet tile before installing these items.

1. Quantity: 2 percent, but not less than 1 gal. of each material and color applied.

PART 2 - PRODUCTS

2.1 PAINT MATERIALS, GENERAL

A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.

C. Basis of Design: SherwinWilliams or approved equal.
1. Exposed exterior pipes/conduits/downspout: Rhinestone SW1235, flat acrylic.
2. Exposed exterior metal coping: Semi-gloss acrylic. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**
3. Interior walls (P): Rhinestone SW1235, semi-gloss acrylic.
4. Interior soffit accent in Assembly Hall, Toilet Rooms, Physical Fitness and Break/Vending Room: Flat acrylic. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**
5. Exposed interior ductwork, piping, conduits in Assembly Hall: "Rhinestone", SW1235, flat acrylic.

2.2 PREPARATORY COATS

A. Exterior Primer: Exterior alkyd or latex-based primer of finish coat manufacturer and recommended in writing by manufacturer for use with finish coat and on substrate indicated.
1. Ferrous-Metal and Aluminum Substrates: Rust-inhibitive metal primer.
2. Zinc-Coated Metal Substrates: Galvanized metal primer.
3. Where manufacturer does not recommend a separate primer formulation on substrate indicated, use paint specified for finish coat.

B. Interior Primer: Interior latex-based or alkyd primer of finish coat manufacturer and recommended in writing by manufacturer for use with finish coat and on substrate indicated.
1. Ferrous-Metal Substrates: Quick drying, rust-inhibitive metal primer.
2. Zinc-Coated Metal Substrates: Galvanized metal primer.
3. Where manufacturer does not recommend a separate primer formulation on substrate indicated, use paint specified for finish coat.

2.5 FINISHES

A. Aluminum, Baked-Enamel Finish: Clean with inhibited chemicals and apply conversion coating and primer/topcoat system complying with AAMA 2603, except with a minimum dry film thickness of 1.5 mils, medium gloss.

1. Color: Match Kynar 500. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**

PART 3 - EXECUTION

3.1 INSTALLATION

A. Locate and place louvers and vents level, plumb, and at indicated alignment with adjacent work.

B. Use concealed anchorages where possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.

C. Provide perimeter reveals and openings of uniform width for sealants and joint fillers, as indicated.

D. Repair damaged finishes so no evidence remains of corrective work. Return items that cannot be refinished in the field to the factory, make required alterations, and refinish entire unit or provide new units.

E. Protect galvanized and nonferrous-metal surfaces from corrosion or galvanic action by applying a heavy coating of bituminous paint on surfaces that will be in contact with concrete, masonry, or dissimilar metals.

END OF SECTION 10200

4. Boxed End Panels: Fabricated from 0.0528-inch- thick, cold-rolled steel sheet.

L. Finish: Baked enamel or powder coat.
1. Basis of Design: Penco Products, Inc., or approved equal. **Color to be selected from manufacture full range by the Contracting Officer Representative (COR).**

2.4 LOCKER ROOM BENCHES

A. General: Provide locker room benches fabricated by same manufacturer as metal lockers.

B. Bench Tops: Manufacturer's standard 1-piece units, of the following material, minimum 9-1/2 inches wide by 1-1/4 inches thick, with rounded corners and edges:
1. Laminated maple or birch with one coat of clear sealer on all surfaces, and one coat of clear lacquer on top and sides.

C. Fixed Pedestals: Manufacturer's standard supports, with predrilled fastener holes for attaching bench top and anchoring to floor, complete with fasteners and anchors, and as follows:
1. Steel Tubing: 1-1/2-inch- diameter steel tubing threaded on both ends, with standard pipe flange at top and bell-shaped cast-iron base; with baked-enamel or powder-coat finish; anchored with exposed fasteners.
a. Basis of Design: Penco Products, Inc., or approved equal, #28 "Gray."

2.5 FABRICATION

A. General: Fabricate metal lockers square, rigid, and without warp; with metal faces flat and free of dents or distortion. Make exposed metal edges free of sharp edges and burrs, and safe to touch.
1. Form body panels, doors, shelves, and accessories from one-piece steel sheet, unless otherwise indicated.
2. Provide fasteners, filler plates, supports, clips, and closures as required for a complete installation.

B. Unit Principle: Fabricate each metal locker with an individual door and frame; individual top, bottom, and back; and common intermediate uprights separating compartments.

C. Knocked-Down Construction: Fabricate metal lockers for nominal assembly at Project site using nuts, bolts, screws, or rivets. Factory weld frame members together to form a rigid, one-piece assembly.

D. All-Welded Construction: Factory preassemble metal lockers by welding all joints, seams, and connections, with no bolts, nuts, screws, or rivets used in assembly of main locker groups. Factory weld main locker groups into one-piece structures. Grind exposed welds flush.

2. Motorized Vent Damper: Interlocked with burner to open before burner is operating. If damper fails to open, stop burner operation.
3. Operating Pressure Control: Factory wired and mounted to cycle burner.

C. Building Management System Interface: Factory-installed hardware and software to enable building management system to monitor and control hot-water set point and display boiler status and alarms.

2.8 VENTING KITS

A. Vent Damper: Motorized, 24-V ac, UL listed for use with standing pilot or intermittent ignition on atmospheric burner boiler equipped with draft hood. Interlock with burner.

B. Kit: ASTM A 959, Type 29-4C, stainless-steelvertical vent terminal, roof passage thimble, indoor wall plate, vent adapter, condensate trap, and sealant.

C. Combustion-Air Intake: Stainless-steel, vent terminal with screen, inlet air coupling, and sealant.

D. Chimney and Type B Vent Adapter: Vent adapter and sealant.

2.9 SOURCE QUALITY CONTROL

A. Test and inspect factory-assembled boilers, before shipping, according to ASME Boiler and Pressure Vessel Code: Section I, for high-pressure boilers and Section IV, for low-pressure boilers.

B. Burner and Hydrostatic Test: Factory adjust burner to eliminate excess oxygen, carbon dioxide, oxides of nitrogen, and carbon monoxide in flue gas and to achieve combustion efficiency; perform hydrostatic test.

C. Allow Government access to source quality-control testing of water-tube boilers. Notify COR 14 days in advance of testing.

2.10 FREEZE PROTECTION

A. Add 26% by mass Glycol to hot water system.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Before boiler installation, examine roughing-in for concrete equipment bases, anchor-bolt sizes and locations, and piping and electrical connections to verify actual locations, sizes, and other conditions affecting boiler performance, maintenance, and operations.
1. Final boiler locations indicated on Drawings are approximate. Determine exact locations before roughing-in for piping and electrical connections.

1.5 COORDINATION

A. Coordinate layout and installation of exhaust fan and support structure with other trades including but not limited to lighting, conduits, piping, sprinklers, and ductwork.

B. Coordinate layout and installation of floor receptacles and underground ductwork with under slab sanitary waste lines, under slab waste oil lines, and other trades.

1.6 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Belts: One set for each belt-driven fan.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
   1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
   2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 VEHICLE EXHAUST REMOVAL SYSTEM

A. Manufacturers:
   1. Ammerman.
   2. Car-Mon Products, Inc.
   3. General Resource Corporation - Ammerman
   4. National System of Garage Ventilation, Inc.
   5. PlymoVent Corporation.

B. Configuration: System shall be an **overhead** type with **Two 35 ft** hose **reel @ 695 Deg F exhaust temperature** with ductwork, exhaust fan, fittings, and accessories as required.

C. Exhaust Fan:
   1. Fan shall be single inlet, single width centrifugal fan with non-overloading, backward inclined fan wheel. Fan blades shall be continuously welded to both the shroud and the back plate. The fan wheel shall be statically and dynamically balanced before assembly. Any required balance weights shall be welded to the outside of the shroud or back plate; no weights shall be installed in the air stream.

2. Bearings shall be pillow block type with cast steel frame and shall be bolted to the structural angle bearing supports. Fan shaft shall be fabricated of ground and polished cold drawn steel with machined centers and keys for the fan wheel and drive shaft. Fan shaft shall have a rust inhibitive coating after assembly. The V-belt drive shall be adjustable. The variable pitch sheave shall be factory set at the appropriate position to provide the specified capacity in the midpoint of the adjustment range. Fan shall include belt guard enclosing both sheaves and V-belts. Drive shall be rated for no less than 150% of motor load.
3. Fan housing shall be made of 12-gauge minimum cold rolled steel. All seams in individual components shall be continuously welded. Fan base and inlet support shall be fabricated of 12 gauge minimum cold rolled steel. Bearing supports shall be fabricated of cold rolled steel angles welded to the sides of the base. Motor base shall be fabricated of 10 gauge minimum cold rolled steel. Motor base shall be adjustable through the use of adjustment bolts that travel through slots in the sides of the fan base. All surfaces of the fan exposed to the air stream including the complete fan wheel shall be painted completely with an acid-resistant, phenolic synthetic resinous coating.

D. Exhaust Fan Mounting Platform:
1. Wall mount fan or ceiling suspension platform shall be heavy-duty, all welded construction. The platform shall use 3/16" thick angle iron. The 3" x 4.1 lb base channel of the vibration rails shall be an integral part of the platform assembly.

E. Above floor ductwork shall be 18 gauge-galvanized steel by United Sheet Metal spiral duct or equivalent.
F. Provide vibration isolation for each support point of exhaust fan. Refer to Section "Mechanical Vibration Controls."

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install exhaust fan and support structure level and plumb. Maintain sufficient clearance for normal service and maintenance. Field verify actual location coordinate with other mechanical/plumbing, structural and architectural plans.

3.2 CONNECTIONS

A. Connect ducts to fan with flexible connections according to Division 15 Section "Duct Accessories.

B. Connect wiring according to Division 16 Section "Conductors and Cables."

4. Inspection period, cleaning methods, cleaning materials recommended, and calibration tolerances.
5. Calibration records and list of set points.

I. Qualification Data: For firms and persons specified in "Quality Assurance" Article.

J. Project Record Documents: Record actual locations of control components, including control units, thermostats, and sensors. Revise Shop Drawings to reflect actual installation and operating sequences. All software and firmware operational documents should also be revised to final conditions. The software back-up should be complete enough to allow re-creation of the as-built system, if there is a hard drive crash or computer theft.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is an authorized representative of the automatic control system manufacturer for both installation and maintenance of units required for this Project.

B. Manufacturer Qualifications: A firm experienced in manufacturing automatic temperature-control systems similar to those indicated for this Project and with a record of successful in-service performance.

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

D. Comply with NFPA 90A, "Installation of Air Conditioning and Ventilation Systems."

E. Comply with ASHRAE 135 for DDC system control components.

F. Year-2000 Compliant: Computer hardware and software shall be capable of accurately processing, providing, and receiving date data from, into, and between the twentieth and twenty-first centuries, including leap-year calculations.

G. **Comply with "LonWorks Protocol."**

1.6 DELIVERY, STORAGE, AND HANDLING

A. Factory-Mounted Components: Where control devices specified in this Section are indicated to be factory mounted on equipment, arrange for shipping of control devices to unit manufacturer.

1.7 COORDINATION

A. Coordinate location of thermostats, humidistats, and other exposed control sensors with plans and room details before installation.

2.2 OPERATOR WORKSTATION (OWS)

A. ECMS Operator Workstation Operation: Operator workstation shall be provided as part of the ECMS. One OWS shall be located in the maintenance room.

B. Hardware: As a minimum, provide the following hardware. Where the ECMS manufacturer's recommended OWS hardware requirements exceeds these minimum requirements, provide hardware in accordance with the manufacturer's recommendations.

1. A personal computer with Intel Pentium IV processor with the following minimum requirements:
   a. 3000 megahertz clock speed or higher.
   b. 512 megabytes of RAM.
   c. 512 kilobytes cache on CPU.
   d. 1.4 megabyte, 3-1/2 inch floppy disk drive.
   e. 32x CD ROM/DVD/RW
   f. 20 Gigabyte IDE ULTRA 160 hard drive with maximum 9 millisecond access time.
   g. Super Video Graphics Array (SVGA) display driver with minimum 32 megabytes of video RAM and MPEG capability.
   h. 21 inch **flat panel** color monitor with minimum SVGA resolution of 1280 by 1024 pixels, and true colors.
   i. 56,000 bps V.34 telephone modem with hardware based V.42 data compression, which will allow future remote communication access to the entire ECMS.
   j. Sound card with powered speakers.
   k. Full upper and lower case ASCII keyboard, numeric keypad, cursor control keypad and a minimum of 12 programmable function keys.
   l. 2 button mouse-optical.
   m. USB ports for connection to printers.
   n. RS-232 port.
   o. 10/100 Mbps ETHERNET communications port for communication with the ECMS.
2. The personal computer shall function as a primary operator station complete with mouse, keyboard and color monitor. The operator workstation shall provide total keyboard-less operation as the primary operator interface.
3. A color laser printer with 19 pages per minute minimum print speed, minimum 32 megabytes of RAM, and 500 sheet paper tray.

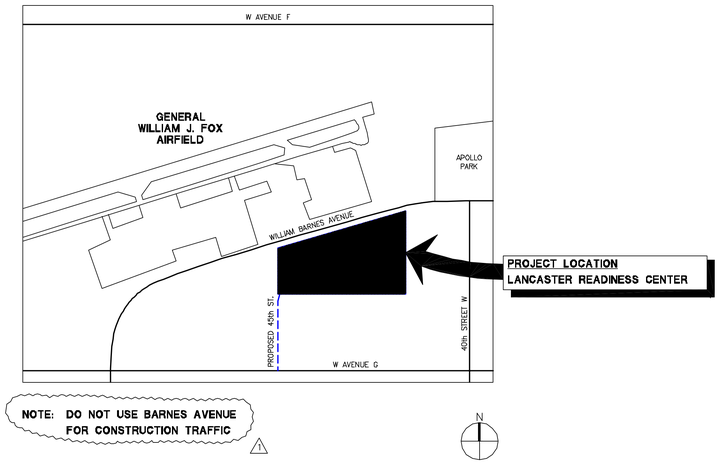
C. Software:

1. Software shall operate in multitasking operating system which provides operator full access and control of the ECMS; Access to software shall be password protected and require a unique user ID with established user access control lists. The operating system for the OWS shall be Microsoft Windows XP PRO, latest available version.

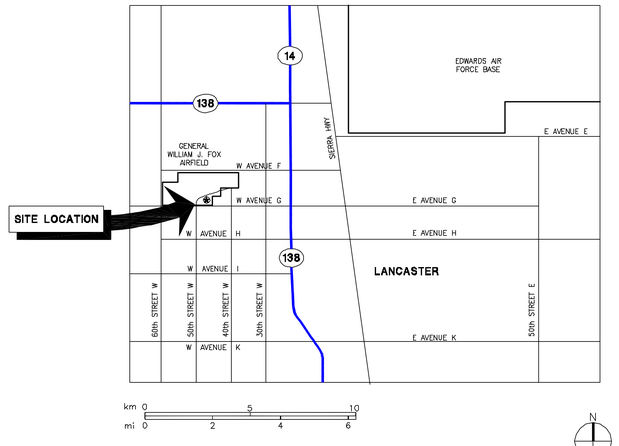
CALIFORNIA ARMY NATIONAL GUARD

LANCASTER READINESS CENTER
LANCASTER, CALIFORNIA

Contract No. W91238-04-F-0064
ARNG PROJECT No. 060297
SPECIFICATION No. 1406



2 **LOCATION MAP**
SCALE: NONE



1 **VICINITY MAP**
SCALE: AS NOTED

BID OPTIONAL ITEMS (BOI) LIST

BOI #1 – RIGID (CONCRETE) PAVING IN LIEU OF FLEXIBLE (ASPHALT CONCRETE) – PAVING IN GOV PARKING AREA

BOI #2 – LANDSCAPING

BOI #3 – UNHEATED STORAGE BUILDING

BOI #4 – COVERED WASH PLATFORM

BOI #5 – FUEL STORAGE SYSTEM

BOI #6 – MARKERBOARDS/ TACKBOARDS/ PROJECTION SCREENS

BOI #7 – FOLDING PARTITIONS

BOI #8 – LOCKERS AND BENCHES

BOI #9 – FOOD SERVICE EQUIPMENT (NON-FIXED)

BOI #10 – AIR COMPRESSOR

BOI #11 – EMERGENCY GENERATOR (E/G)

BOI #12 – DISPLAY CASE, MONUMENT SIGN, EPOXY FLOORING 1

BOI #13 – FIXED KITCHEN EQUIPMENT

BOI #14 – ASPHALT PAVEMENT IN GOVERNMENT PARKING AREA

NIC ITEMS:

A – SYSTEMS FURNITURE
B – FURNISHINGS
C – BREAK ROOM EQUIPMENT
1 – MICROWAVE
2 – REFRIGERATORS
3 – VENDING MACHINES

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

APPROVAL RECOMMENDED: _____ CHIEF, MILITARY PROJECTS BRANCH

APPROVED: _____ CHIEF, ENGINEERING DIVISION

DATE: _____

PERPARED UNDER THE DIRECTION OF

_____ COL, CORPS OF ENGINEERS, U.S.A. DISTRICT ENGINEER

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

LICENSED ARCHITECT
PAUL LONGMORE
C22255
EXP. 12/05
STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
COVER SHEET, VICINITY AND LOCATION MAPS

AM-02

Designed By: RB
Drawn By: JC
Checked By: SD

Drawing No.
T000

USER NAME: ALee
PLOT DATE: 08/31/2004 - 3:00PM
FILENAME: P:\F1W15401\700ADD\701ARGN\1541T000.dwg

GENERAL NOTES:

1. ALL WORK PERFORMED IN THIS CONTRACT SHALL CONFORM TO:

   A. PROJECT SPECIFICATIONS.

   B. WORK WITHIN PUBLIC RIGHT OF WAY SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND AMERICAN PUBLIC WORKS ASSOCIATION (APWA).

   C. CITY OF LANCASTER & AMERICAN PUBLIC WORKS STANDARD.

   D. GENERAL CIVIL NOTES AND ARMY NATIONAL GUARD STANDARDS SHALL APPLY TO ALL CIVIL SHEETS.

2. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE WORK SPECIFIED ON THE DRAWINGS AND WITHIN THE VARIOUS NOTES SHOWN HEREIN.

3. THE EXISTING CONDITIONS SHOWN DIAGRAMMATICALLY ON THE PLANS ORIGINATED FROM AS BUILT DRAWINGS AND FIELD SURVEY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE JOB SITE AND VERIFY THE EXACT EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. ANY DISCREPANCY SHALL BE REPORTED IMMEDIATELY TO THE CONTRACTING OFFICER'S REPRESENTATIVE FOR PROPER ACTION.

4. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES IN THE AREA OF WORK WHICH ARE NOT INCLUDED IN THIS CONSTRUCTION. ANY DAMAGE RESULTING FROM THIS WORK SHALL BE REPAIRED AND/OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.

   UNDERGROUND SERVICE ALERT:

5. BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT INQUIRY I.D. NUMBER BY CALLING 1-800-422-4133. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE EXCAVATION WORK IS STARTED THAT UTILITY OWNERS CAN BE NOTIFIED.

   PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS:

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PUBLIC AND PRIVATE PROPERTY ADJACENT TO THE WORK PER SECTION 7-9 OF THE STANDARD SPECIFICATIONS.

   REMOVALS:

7. EXISTING FACILITIES WHICH ARE INDICATED ON THESE PLANS TO BE REMOVED SHALL BE TOTALLY REMOVED, UNLESS OTHERWISE INDICATED. EXISTING FACILITIES WHICH ARE DISCOVERED DURING CONSTRUCTION (INCLUDING WALLS, FOOTINGS AND FOUNDATIONS) SHALL BE REPORTED TO AND COORDINATED WITH THE CONTRACTING OFFICER'S REPRESENTATIVE AS TO THEIR REMOVAL. IF REQUIRED INSTALL PAVEMENT JOINT DETAIL PER DETAIL 4 ON SHT. C106.

8. ALL SITE PREPARATION AS INDICATED SHALL BE MADE UNDER THE CONTINUOUS INSPECTION OF THE CONTRACTING OFFICER'S REPRESENTATIVE. SECURE THE REQUIRED PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR THE CONSTRUCTION OF TRENCHES, SHORING OR EXCAVATIONS WHICH ARE 5 FEET OR DEEPER OR WORK THAT MAY JEOPARDIZE THE WORKERS. SHORING CALCULATIONS SHALL BE PROVIDED AS REQUIRED FOR APPROVAL AND PERMITTING.

9. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA SUFFICIENTLY DAMPENED TO CONTROL DUST CAUSED BY WORK ACTIVITIES AS REQUIRED BY THE OWNER. THE CONTRACTOR SHALL PROVIDE 6' HIGH TEMPORARY FENCING WITH VISUAL BARRIER AROUND THE PROJECT LIMITS AND A TEMPORARY CONSTRUCTION ROAD ON-SITE.

10. ALL WORK IN THE PUBLIC RIGHT OF WAY REQUIRES APPROVAL BY THE CITY OF LANCASTER DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL SECURE AND PAY FOR ANY PERMIT INCLUDING UTILITY CONNECTIONS REQUIRED PRIOR TO CONSTRUCTION.

11. ALL FILL OR BACKFILL SHALL BE COMPACTED BY AS SPECIFIED IN THE GEOTECHICAL REPORT.

12. UPON COMPLETION OF PROJECT, CONTRACTOR SHALL REMOVE EXISTING CONSTRUCTION FENCING, APPURTENANCES AND OFFICE TRAILERS FROM THE SITE. PAVEMENT SHALL BE PATCHED AND REPAIRED TO MATCH ADJACENT PAVEMENT AND APPROVED BY THE CONTRACTING OFFICER'S REPRESENTATIVE OR CITY INSPECTOR AS APPLICABLE.

13. ANY ADDITIONAL SURVEYS OR TESTING AS A RESULT OF CONTRACTOR ERROR OR MISINFORMATION WILL BE CHARGED TO THE CONTRACTOR.

14. THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHOWN HEREIN ARE THE BEST ESTIMATE AVAILABLE. THE ENGINEER DOES NOT WARRANT THE COMPLETENESS OR CORRECTNESS OF THE LOCATIONS. IT SHALL BE CONTRACTOR'S FULL RESPONSIBILITY TO PROTECT IN PLACE OR REPAIR ALL UTILITIES IDENTIFIED ON THESE DRAWINGS. CONTRACTOR SHALL EXERCISE REASONABLE DILIGENCE DURING EXCAVATION IN ALL AREAS. CONTRACTOR MAY POT-HOLE TO LOCATE UNDERGROUND INSTALLATIONS AT HIS OWN EXPENSE PRIOR TO COMMENCING EXCAVATION.

15. WHENEVER MATERIAL OR A PIECE OF EQUIPMENT IS REFERRED TO ON THE PLANS BY THE MANUFACTURER'S BRAND NAME, SYMBOL OR CATALOG NUMBER, IT SHALL BE UNDERSTOOD TO INDICATE ITS TYPE, STYLE AND QUALITY, AND NOT NECESSARILY ITS MANUFACTURER.

16. CONTRACTOR SHALL LOCATE ALL CONSTRUCTION TRAILERS AND STORE ALL MATERIALS NOT BEING WORKED ON IN THE DESIGNATED "LAY-DOWN" AREA. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SECURITY ON THE CONSTRUCTION SITE DURING CONSTRUCTION.

LEGEND:

4" THICK CLASS C2 AC SURFACING OVER 6" THICK CRUSHED AGGREGATES BASE, (CAB), PER DETAIL 3 ON DRAWING NO. C106.

6" THICK OF CONCRETE PAVEMENT OVER 6" THICK CRUSHED AGGREGATE BASE, (CAB), #4 @ 18" O.C., PER DETAIL 5 ON SHEET C106.

TURF AREA (SEE LANDSCAPING DWGS)

PROPERTY LINE

CENTER LINE

GRADE CHANGE

FINISHED GRADE CONTOUR — 2331

EXISTING GRADE CONTOUR — 2331

EXISTING GRADE ELEVATION — (2331)

FINISHED GRADE ELEVATION — 2331

CHAIN LINK FENCE (CLF) — x — x

FLOW LINE

RIDGE LINE — R

GRADE BREAK — GB

GAS LINE — G

ELECTRICAL CONDUIT — E

TRAFFIC SIGNAL LINE — TS

STORM DRAIN LINE — SD

SEWER LINE — S

WATER LINE — W

SITE WALL

CONTROL POINT

STORM DRAIN MANHOLE

SEWER MANHOLE

GAS MANHOLE

GAS VALVE — GV

STREET LIGHT

PULL BOX — PB

ELECTRICAL RISER

GUY WIRES

PARKING METER — PM OR

POWER POLE

TELEPHONE RISER

WATER METER — WM

WATER VALVE — WV

FIRE HYDRANT

FIRE DEPARTMENT CONNECTION — FDC

HOSE BIBB — HB

POST INDICATOR VALVE — PIV

CONCRETE WALK

PROPERTY LINE — PL

ABBREVIATIONS:

AB	AGGREGATE BASE
ABM	AIR BLOWN MORTAR
AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
AD	AREA DRAIN
AGGR	AGGREGATE
APWA	AMERICAN PUBLIC WORKS ASSOCIATION
ARCH	ARCHITECTURAL
ASB	ASBESTOS
ASPH	ASPHALT
BC	BEGINNING OF CURVE
BCR	BEGIN CURVE RETURN
BITUM	BITUMINOUS
BLDG	BUILDING
BM	BENCHMARK
BOI	BID OPTION ITEM(S)
BOT	BOTTOM
BV	BUTTERFLY VALVE
BW	BACK OF WALK
CAB	CRUSHED AGGREGATE BASE COURSE
CB	CATCH BASIN
CEFB	CITY ENGINEER FIELD BOOK
Ç	CENTERLINE
CF	CURB FACE
CJ	CONTROL JOINT
CI	CAST IRON
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CLR	CLEAR
CMB	CRUSHED MISCELLANEOUS BASE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
CP	CONTROL POINT
CTR	CENTER
DDSG	DRIVE DOUBLE-LEAF SWING GATE
DET	DETAIL
DF	DOUGLAS FIR
DI	DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DMH	DRAIN MAINTENANCE HOLE
DS	DOWN SPOUT
DW	DOMESTIC WATER
DWG(S)	DRAWING(S)
DWP	DEPARTMENT OF WATER AND POWER
DWY	DRIVEWAY
E	EAST
EA	EACH
EC	END OF CURB
ECR	END CURB RETURN
EDS	EDISON
ELEC	ELECTRICAL
EL, ELEV	ELEVATION
EJ	EXPANSION JOINT
EP	EDGE OF PAVEMENT
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST, EX	EXISTING
EXP	EXPANSION
FB	FIELD BOOK
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FF	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FIN	FINISH
FL	FLOW LINE
FOC	FACE OF CONCRETE
FS	FINISH SURFACE
FT	FOOT OR FEET
FW	FIRE WATER
G	GAS
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BREAK
GF	GARAGE FLOOR
GM	GAS METER
GOV	GOVERNMENT OWNED VEHICLE
GR	GRADE
GVLT GV	GAS VAULT GAS VALVE
HORIZ	HORIZONTAL
HP	HIGH POINT
HW	HEADWALL
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INV	INVERT
IRR	IRRIGATION
ITEM NO.	ITEM SHOWN ON PTR
L	LENGTH
MAX	MAXIMUM
MEAS	MEASURED
MH	MAINTENANCE HOLE, MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NPR	NEWSPAPER RACK
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER (DIM.)
P	PROPORTIONED
PA	PLANTING AREA
PCC	PORTLAND CONCRETE CEMENT
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE
PROP'D	PROPOSED
PM	PUNCH MARK OR MANHOLE, PARKING METER
POC	POINT OF CONNECTION
POV	PERSONAL OWNED VEHICLE
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PSG	PEDESTRIAN SWING GATE
PTR	PRELIMINARY TITLE REPORT
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
R	RADIUS (GEOMETRY) OR RIDGE (GRADING) OR RECORD (SURVEY)
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
R/W	RIGHT OF WAY
S=	SLOPE FT/FT
S	SOUTH
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDR	STANDARD PIPE DIMENSION RATIO
SF	SQUARE FEET
SL	SLOPE
SLPB	STREET LIGHT PULLBOX
SPK	SPIKE
SQ	SQUARE
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD(S)	STANDARD(S)
S&W	SPIKE & WASHER
SW	SIDEWALK
SYM	SYMMETRICAL
T	TANGENT
TA	TREE AREA
TAD	TOP OF AREA DRAIN
TC	TOP OF CURB
TCB	TOP OF CATCH BASIN
TEL	TELEPHONE
TEL VLT	TELEPHONE VAULT
TG	TOP OF GRATE
TMH	TELEPHONE MANHOLE
TMS	TOP OF MOW STRIP
TP	TOP OF PAVEMENT
TS	TOP OF SLAB SLOPE
TSPB	TRAFFIC SIGNAL PULLBOX
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VIF	VERIFY IN FIELD
V V	VAULT VENTS
W	WEST
W/	WITH
W/O	WITHOUT
WM	WATER METER
WV	WATER VALVE
WVLT	WATER VAULT
YB (W,S,G,E)	YARD BOX (WATER, SEWER, GAS, ELECTRICAL)

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

VCA ENGINEERS INC.
3661 Medford Street Los Angeles, CA 90063
Tel. 323.728.8088 Fax. 323.728.8043

VIRGILIO C. ACANAL RCE36079 DATE

Seal:

REGISTERED PROFESSIONAL ENGINEER VIRGILIO C. ACANAL No. C36079 Exp. 6/30/06 CIVIL STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
GENERAL NOTES LEGENDS, AND ABBREVIATIONS

AM-02

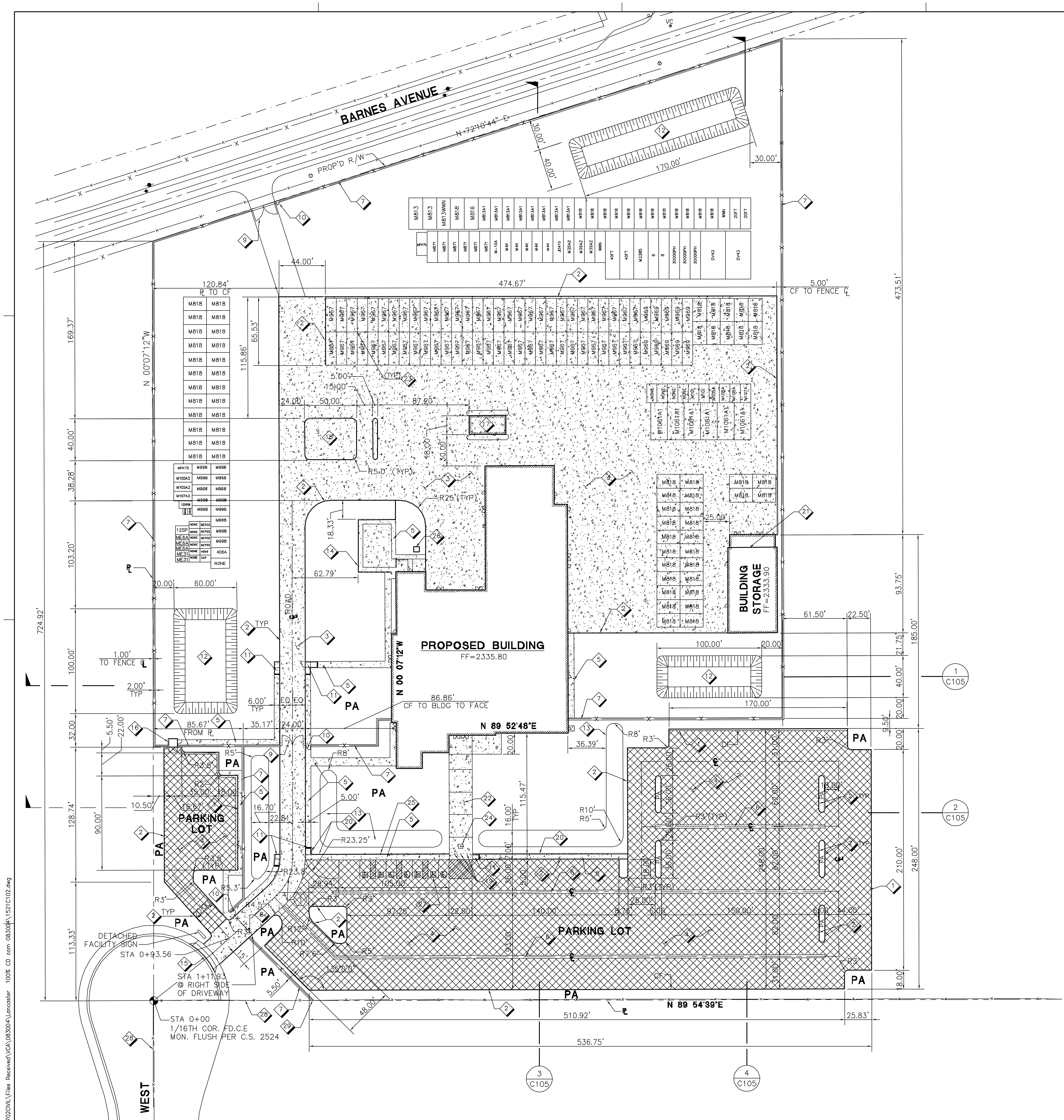
Designed By: DKB
Drawn By: DKB
Checked By: VCA

Drawing No.
C101

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: cdburn
PLOT DATE: 08/27/2004 - 4:18PM
FILENAME: P:\F1W15401\700DADD\702CIVIL\152IC101.dwg



SITE CONTROL PLAN

CONSTRUCTION NOTES

1. CONCRETE CURB AND GUTTER PER DETAIL 2 ON SHEET C106.
2. 6" CONCRETE CURB PER DETAIL 1 ON SHEET C106.
3. CONCRETE PAVEMENT PER DETAIL 5 ON SHEET C106 (BOI #1).
4. POV ASPHALT PAVEMENT PER DETAIL 3 ON SHEET C106.
5. CONCRETE PAVING PER DETAIL 8 ON SHEET C106.
6. CONCRETE V-GUTTER PER DETAIL 7 ON SHEET C106.
7. CHAINLINK SECURITY FENCE PER DETAIL 1 ON SHEET C107 PROVIDE CONC. MOW STRIP PER DETAIL 9 ON SHT. C106.
8. VEHICULAR GATE (SLIDING TYPE) PER DETAIL 1 ON SHEET C111.
9. CHAINLINK VEHICULAR GATE (SWING TYPE) PER DETAIL 1 ON SHEET C107.
10. CHAINLINK PEDESTRIAN GATE PER DETAIL 7 ON SHEET C107.
11. HANDICAPPED RAMP, PER DETAIL 1 ON SHEET C110.
12. SETTLING BASIN PER DETAIL 3 ON SHT. C107.
13. EARTH BERM, 3' HIGH SEE DETAIL 5 ON SHEET C109.
14. EQUIPMENT PAD ENCLOSURE SEE ARCHITECTURAL DRAWINGS.
15. CONCRETE DRIVEWAY APWA STANDARD PLAN 110-1.
16. REFUSE ENCLOSURE, SEE ARCHITECTURAL DRAWINGS.
17. COVERED WASH PLATFORM. SEE STRUCTURAL DRAWINGS AND DETAIL 2 ON SHEET C110 (BOI #4).
18. FUELING STATION FACILITY, SEE DETAIL 1 ON SHEET C112 (BOI #5).
19. BOLLARD PER DETAIL 2 ON SHEET C107 SEE ARCHITECTURAL DRAWINGS FOR HORIZONTAL DIMENSIONS.
20. CONCRETE CURB (a=12") PER DETAIL 1 ON SHEET C106.
21. UNHEATED STORAGE BUILDING (BOI #3).
22. COLORED CONCRETE SIDEWALK, SEE ARCHITECTURAL DRAWINGS.
23. FOR LIGHT POLE LOCATIONS, SEE ELECTRICAL DRAWINGS.
24. FLAGPOLE FOUDATION SEE DETAIL 3 ON SHEET C109.
25. HANDICAP SIGNS, SEE ARCHITECTURAL DRAWINGS FOR HORIZONTAL DIMENSIONS.
26. 62"x 62"x4' DEEP UTILITY VAULT, USE BROOKS PRODUCTS CATALOG # 766 PRECAST METER VAULT OR APPROVED EQUAL.
27. HANDICAP PARKING, SEE DETAIL 4,5 & 6 SHEET C107.
28. EXISTING FENCE TO BE REMOVED.
29. CONNECT TO EXISTING FENCE.

SURVEY NOTES:

1. BASIS OF BEARING :

   CALIFORNIA COORDINATE SYSTEM, ZONE 5, AS ESTABLISHED BY THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS FROM THE CALIFORNIA HPGN-D NETWORK DATED MARCH 1997.

2. BENCHMARK:

   N: 2091046.6001 (FT)
   E: 6497606.9776 (FT)
   FOUND CHISEL "+"EASTERLY RIM SEWER MANHOLE PER PWFB 3822, PAGES 47,48. ELEVATION=2335.285 COUNTY OF LOS ANGELES.

3. TOPOGRAPHICAL SURVEY WAS PREPARED BY AMERICAN LAND SURVEYS (GARY CREASON 562-402-0486) PROJECT NO. GPC88911 DATED MAY 12, 2004.

4. LOS ANGELES COUNTY IS CURRENTLY DESIGNING & DEVELOPING THE SURROUNDING UTILITY AND STREET IMPROVEMENT. THIS SURVEY UTILIZED THE SAME HORIZONTAL AND VERTICAL GPS CONTROL ESTABLISH BY L.A. COUNTY FOR DESIGN & DEVELOPMENT PURPOSES.

SHEET NOTES:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE DWG. C101.
2. ALL SITE IMPROVEMENTS ARE PARALLEL AND PERPENDICULAR TO WESTERLY PROPERTY LINES.
3. ALL PARKING STALL ISLAND RETURNS ARE 3 FOOT RADII UNLESS OTHERWISE NOTED.
4. ALL CURB FACE HEIGHTS ARE 6 INCHES UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS ARE TO CURB FACE, CL, PROPERTY LINE OR BUILDING CONCRETE FACE.

CURVE DATA					
MARK	R	Δ	L	T	REMARKS
1	46.60'	42°01'48"	39.02'	20.73'	@ CENTERLINE OF ROAD

USER NAME: ALee
PLOT DATE: 08/30/2004 - 4:05PM
FILENAME: P:\F1W15401\700CADD\702CIVIL\Files Received\VCA\083004\Lancaster 100% CD com 083004\1521C102.dwg

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

VCA ENGINEERS INC
3651 Medford Street Los Angeles, CA 90063
Tel. 323.729.6098 Fax. 323.729.6043
VIRGILIO C. AOANAN, RCE36079 DATE

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

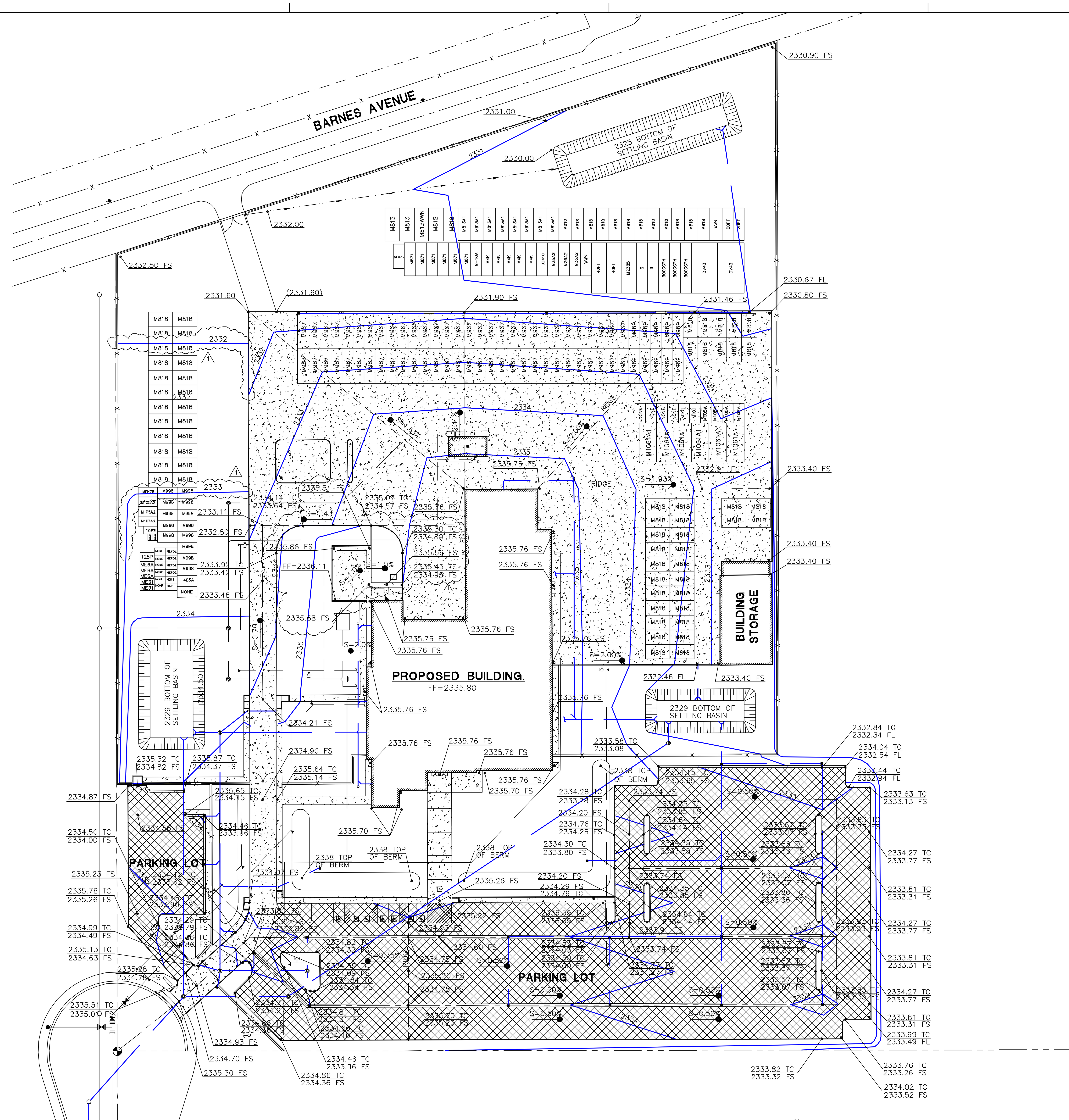
Scale: 0 40' 80' 120'
SCALE: 1"=40'

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

SITE CONTROL PLAN

AM-02

Designed By: AA
Drawn By: DKB
Checked By: VCA
Drawing No. C102



GRADING, PAVING & DRAINAGE PLAN

N

ESTIMATED EARTHWORK

AREA=11.74 ACRES

CUT=200.00 CU. YDS.

FILL=23,800.00 CU. YDS.

OVEREXCAVATION= 12,963 CU. YDS.

GRADING NOTES

1. ELEVATIONS SHOWN ON DRAWINGS ARE TO FEET ABOVE SEA LEVEL.
2. CONTRACTOR SHALL KEEP ALL AREAS WITHIN THE WORK SITE CLEAN AND FREE OF DIRT AND DUST TO THE SATISFACTION OF THE CONTRACTING OFFICER'S REPRESENTATIVE. CONTRACTOR SHALL PROVIDE EROSION CONTROL AS REQUIRED BY THE CONTRACTING OFFICER'S REPRESENTATIVE OR LOCAL AGENCY HAVING JURISDICTION. CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA SUFFICIENTLY DAMPENED TO CONTROL DUST CAUSED BY GRADING AND OTHER CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE CONTRACTING OFFICER'S REPRESENTATIVE.
3. ALL EXISTING PIPES AND ELECTRICAL CONDUIT OR DUCTBANKS THAT ARE EXPOSED BY EXCAVATIONS SHALL BE SUPPORTED. BACKFILL UNDER PIPES AND ELECTRICAL CONDUITS OR DUCTBANKS SHALL BE FILLED WITH COMPACTED GRANULAR MATERIAL TO THE UNDERSIDE OF THE PIPE OR DUCTBANK AND FOR 3 FEET ON EITHER SIDE.
4. ALL ELEVATIONS SHOWN ARE TO THE TOP OF PAVEMENT, TOP OF CURB, CURB FLOWLINE, PIPE INVERT, TOP OF PIPE OR FINISHED SURFACE. CONTRACTOR MUST CONSIDER PAVEMENT AND BASE THICKNESS TO DETERMINE SUBGRADE ELEVATIONS WHERE APPLICABLE. ELEVATIONS SHOWN ON THESE PLANS ARE REFERENCED TO THE CONTROL POINTS AND LINES SHOWN ON THE SITE CONTROL PLAN.
5. ALL GRADING AND GEOTECHNICAL WORK SHALL CONFORM WITH CHAPTER 33 CALIFORNIA BUILDING CODE WITH APPLICABLE AMENDMENTS TO THESE DRAWINGS AND SPECIFICATIONS. GEOTECHNICAL REPORTS ARE AVAILABLE FOR REVIEW AT THE CONTRACTING OFFICE AND SHALL BE PART OF THE BID DOCUMENTS.
6. ANY EXISTING OFF-SITE IMPROVEMENT OR UTILITY REMOVED, DAMAGED OR UNDERCUT BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY AND APPROVED BY THE APPROPRIATE PUBLIC AGENCY OR UTILITY AT NO ADDITIONAL COST TO THE GOVERNMENT.
7. CUT AND FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE SHOWN ON THE DRAWINGS. FILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE GEOTECHNICAL REPORT AND MUST BE APPROVED BY THE CONTRACTING OFFICER'S REPRESENTATIVE.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CONTRACTING OFFICER' REPRESENTATIVE WHEN COMPACTION TESTS ARE NEEDED. IF ANY OF THE COMPACTION TESTS FAIL, THE FOLLOW-UP SOILS TEST WILL BE AT THE CONTRACTOR'S EXPENSE.
9. NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE OF ANY EXISTING UNRECORDED UTILITIES ENCOUNTERED IN THE FIELD NOT SHOWN ON THE DRAWINGS.
10. STAKE AND FLAG LOCATIONS OF EXISTING UTILITIES BEFORE ROUGH GRADING BEGINS.
11. STOCKPILE TOPSOIL IN ONSITE AREA DESIGNATED BY THE CONTRACTING OFFICER'S REPRESENTATIVE. DO NOT STOCKPILE TO A DEPTH EXCEEDING 6 FEET. PROTECT FROM EROSION.
12. ALL LABOR, MACHINERY, CONSTRUCTION EQUIPMENT, AND APPLIANCES USED IN THE SITE WORK OF THIS PROJECT SHALL BE MAINTAINED IN PROPER WORKING ORDER.
13. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS, INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF BASE.
14. FILL MATERIAL SHALL BE OBTAINED FROM A SOURCE APPROVED BY THE CONTRACTING OFFICER. ALL FILL MATERIAL SHALL BE PLACED AND COMPACTED TO 95% RELATIVE DENSITY PER ASTM D1557.

SHEET NOTES:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE DWG. C101.

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

VCA ENGINEERS INC
3951 Medford Street Los Angeles, CA 90063
Tel. 323.729.6098 Fax. 323.729.6043

VIRGILIO C. AOANAN, RCE36079 DATE

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD

LANCASTER READINESS CENTER

CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale: 0 40' 80' 120'

SCALE: 1"=40'

Jacobs Project No.: F1W15401

ARNG Project No.: 060297

Drawing Title:

GRADING , PAVING AND DRAINAGE PLAN

AM-02

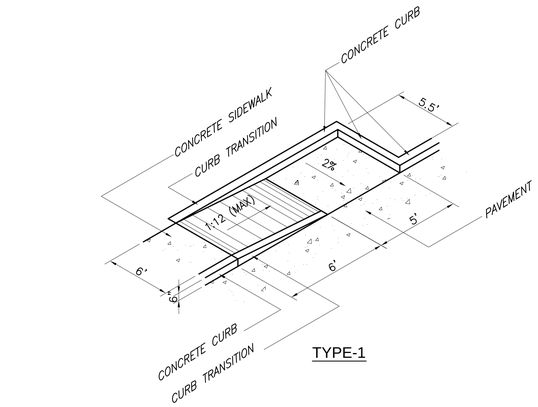
Designed By: AA
Drawn By: DKB
Checked By: VCA

Drawing No. C103

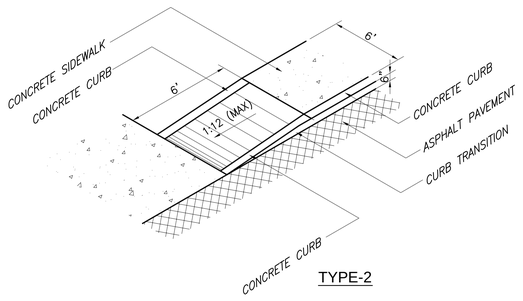
MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

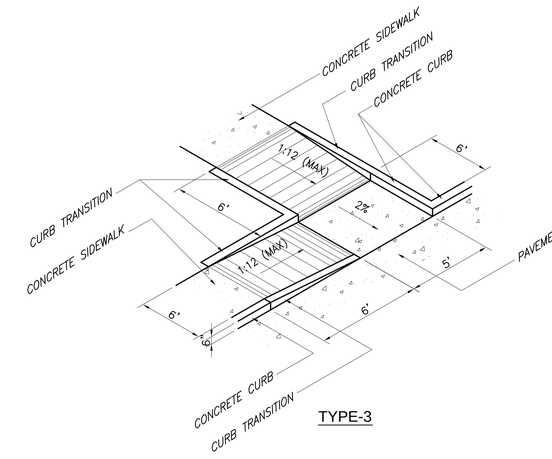
USER NAME: ALee
PLOT DATE: 08/30/2004 - 4:08PM
FILENAME: P:\F1W15401\700CADD\702CIVIL\Files Received\VCA\083004\Lancaster 100% CD com 083004\1521C103.dwg



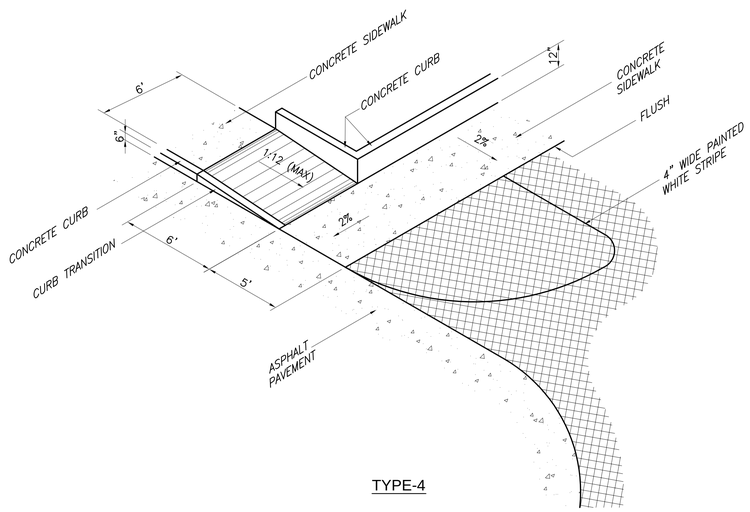
TYPE-1



TYPE-2

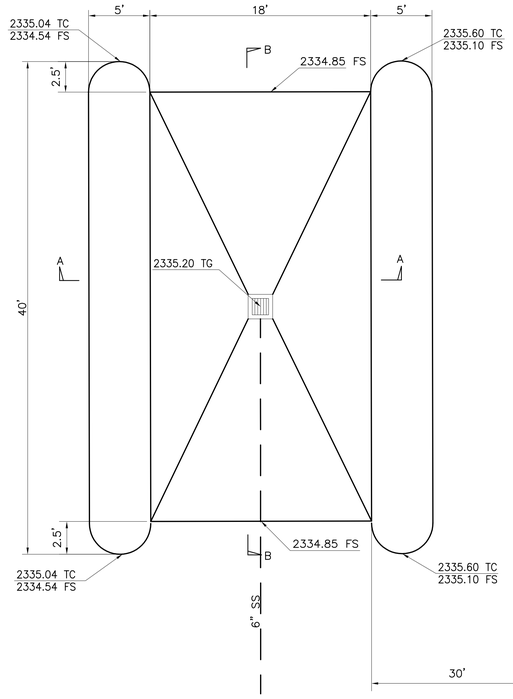


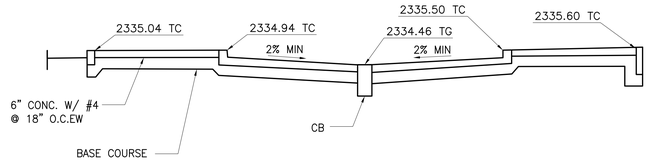
TYPE-3



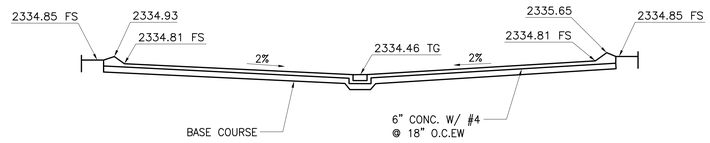
TYPE-4

1 **HANDICAPPED RAMP**
SCALE: NOT TO SCALE





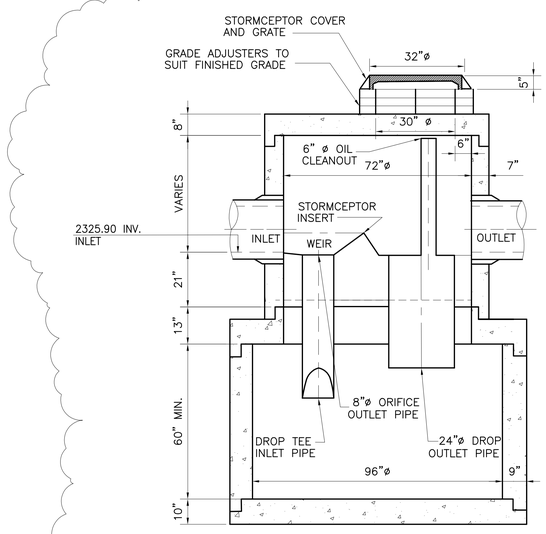
SECTION A-A



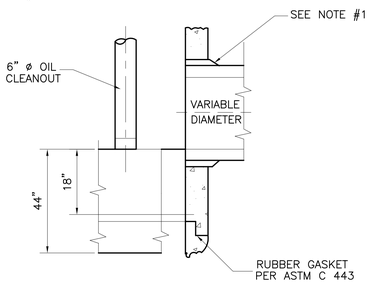
SECTION B-B

VEHICLE WASH PLATFORM AND
FUEL TRUCK CONTAINMENT DETAIL (3 / C110)
NO SCALE

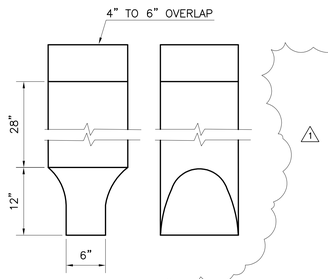
2 **COVERED WASH PLATFORM DETAIL**
SCALE: NOT TO SCALE



SECTION THRU CHAMBER



OUTLET CONNECTION DETAIL



ENLARGE INLET TEE DROP PIPE

NOTES

1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE OUTLET DROP PIPE AND THE OIL CLEANOUT PIPE.

3 **OIL/WATER SEPERATOR (2400 GALLON PRECAST CONCRETE) DETAIL**
SCALE: NOT TO SCALE

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

VCA ENGINEERS INC.
3901 Medford Street Los Angeles, CA 90063
Tel. 323.726.8098 Fax. 323.726.8043

VIRGILIO C. ACANAL RCE36079 DATE

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

MISCELLANEOUS DETAILS

AM-02

Designed By: AA
Drawn By: DKB
Checked By: VCA

Drawing No. **C110**

USER NAME: cdburn
PLOT DATE: 08/31/2004 - 2:26PM
FILENAME: P:\F1W15401\7000ADD\7022WIL\Files Received\VCA\083004\Lancaster 100% CD com 083030#\1521C110.dwg

COLUMN LINE GRID DESIGNATION

PROPERTY LINE

CENTER LINES

MATCH LINE SYMBOL

MATCH LINE
FOR CONTINUATION
SEE DWG XXXX

REFERENCE WHERE DETAIL
XXXX CONTINUES MATCH LINE

BREAK LINES

OUTLINE OF OBJECT ABOVE

TITLE REFERENCE NO.

DRAWING TITLE REFERENCE

X DRAWING TITLE
SCALE: ??"=1'-0"

DETAIL KEY TYPE 1

DETAIL DESIGNATION

SHEET ON WHICH DETAIL IS DRAWN

DETAIL KEY TYPE 2

SECTION KEY

SECTION DESIGNATION

SHEET ON WHICH SECTION IS DRAWN

ELEVATION DESIGNATION

EXTERIOR ELEVATION REFERENCE

SHEET ON WHICH ELEVATION IS DRAWN

INTERIOR ELEVATION DESIGNATION

ELEV # ON SHEET

SHEET ON WHICH ELEVATION IS DRAWN

ELEVATION SYMBOL
(ELEVATIONS & SECTIONS)

100'-0"
FIN. FLR.

ROOM NAME & NUMBER

ROOM NAME
1234

REVISION DESIGNATION

CLOUD TO ENCOMPASS REVISED AREA

REVISION CLOUD

EQUIPMENT TAG

153

KEY NOTE SYMBOL

NUMBER/LETTER INDICATES WALL TYPE

WALL TYPE SYMBOL

GRAPHIC SCALE

0 8" 16" 24"
SCALE: 1/8"=1'-0"

NORTH ARROWS

PROJECT NORTH

TRUE NORTH

6 REFERENCES
SCALE: NONE

VEHICULAR TRAFFIC DIRECTION

DOOR NUMBER

WINDOW NUMBER

LOUVER NUMBER

ACCESSIBLE SYMBOL

FLOOR DRAIN

FLOOR SINK

STEEL LADDER

SERVICE SINK

FLOOR MOUNTED

WALL MOUNTED

LAVATORY

URINAL

WATER CLOSET

WALL MOUNTED

ELECTRIC WATER COOLER

WALL MOUNTED
(HANDICAP)

LOCKERS

FIRE EXTINGUISHER

FE

FIRE EXTINGUISHER CABINET

SURFACE MOUNTED

SEMI-RECESSED

HEIGHT DESIGNATION ABOVE FINISH FLOOR

8'-6" AFF

4 SYMBOLS
SCALE: NONE

EARTH, ETC — EARTH, SAND

CONCRETE, ETC — CONCRETE

METALS — STEEL, ALUMINUM, STRUCT STL

GYPSUM

GLASS — LG SCALE, SM SCALE, ELEV

INSULATION — BATT OR LOOSE, RIGID

ACOUSTIC WALL PANEL

5 MATERIALS
SCALE: NONE

SWITCHES, CONTROL, THERMOSTAT & FIRE ALARM MANUAL STATION

OUTLET BOX, PHONE JACK

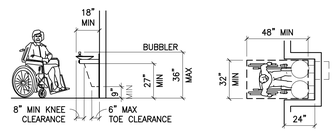
FIRE EXTINGUISHER

CEILING LINE

ILLUMINATED EXIT SIGN, WALL OR STEM MOUNTED

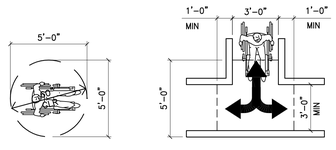
DOOR

NAME PLAQUE



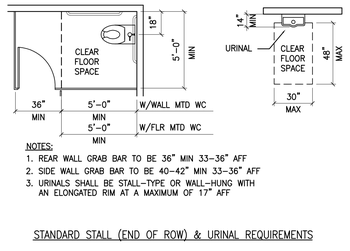
NOTES:
1) EQUIPMENT PERMITTED IN SHADED AREA

SPOUT HEIGHT & CLEARANCE REQUIREMENTS AT DRINKING FOUNTAIN



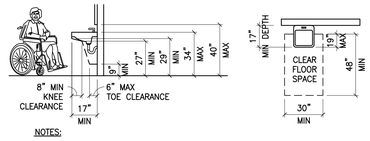
60" DIA. TURNING SPACE

T-SHAPED TURNING SPACE



NOTES:
1. REAR WALL GRAB BAR TO BE 36" MIN 33-36" AFF
2. SIDE WALL GRAB BAR TO BE 40-42" MIN 33-36" AFF
3. URINALS SHALL BE STALL-TYPE OR WALL-HUNG WITH AN ELONGATED RIM AT A MAXIMUM OF 17" AFF

STANDARD STALL (END OF ROW) & URINAL REQUIREMENTS



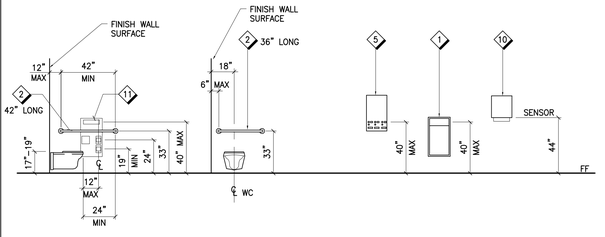
NOTES:
1. BOTTOM OF PANEL SHOULD BE AS HIGH AS POSSIBLE AND STILL CONCEAL AND PROTECT PIPES.
2. PLACE LAVATORY BOWL AS FAR FORWARD AS POSSIBLE AND CUT OUT PIPE PROTECTION PANEL AROUND BOWL.

CLEARANCE REQUIREMENTS & PROTECTIVE PANEL AT LAVATORY

3 CLEARANCES/HEIGHTS
SCALE: NONE

%	PERCENT	
&	AND	
@	AT	
CL/℄	CENTER LINE	
#	POUND, NUMBER	
A	AUTOMATIC	
AB	ANCHOR BOLT	
AC	ASPHALT CONCRETE	
A/C	AIR CONDITIONING	
ACM	ALUMINIUM COMPOSITE MATERIAL	
ACOUS	ACOUSTICAL	
ACST	ACOUSTICAL SUSPENDED TILE	
AD	AREA DRAIN	
ADA/ADAAG	AMERICANS WITH DISABILITIES ACT	
ADJ	ADJUSTABLE, ADJACENT	
AFF	ABOVE FINISH FLOOR	
AL	ALUMINUM	
ALS	ASSISTIVE LISTENING SYSTEM	
APPROX	APPROXIMATE	
ARCH	ARCHITECTURAL	
ARNG	ARMY NATIONAL GUARD	
AV	AUDIO VISUAL	
AWP	ACOUSTICAL WALL PANEL	
BD	BOARD	
BLK	BLOCK	
BLKG	BLOCKING	
BLDG(S)	BUILDING(S)	
BM	BEAM	
BO	BOTTOM OF	
BOI	BID OPTIONAL ITEM	
BOT	BOTTOM	
BR	BRONZE	
C	CHANNEL	
CARNG	CALIFORNIA ARMY NATIONAL GUARD	
CAB,CABT	CABINET	
CB	CATCH BASIN	
CBC	CALIFORNIA BUILDING CODE	
CEM	CEMENT	
CJ	CONTROL JOINT	
CL	CHAIN LINK	
CLSRM	CLASS ROOM	
CLR	CLEAR	
CLG(S)	CEILING(S)	
CNTR	CENTER	
CO	CLEAN OUT	
COL	COLUMN	
CONC	CONCRETE	
CONST	CONSTRUCTION	
CONN	CONNECTION	
CONT	CONTINUOUS	
CONTRL	CONTROL	
COR	CONTRACTING OFFICER REPRESENTATIVE	
CPT	CARPET	
CT	CERAMIC TILE	
CTSK	COUNTERSUNK	
DF	DRINKING FOUNTAIN	
DBL	DOUBLE	
DEPT	DEPARTMENT	
DET, DTL(S)	DETAIL(S)	
DIA	DIAMETER, ROUND	
DIM	DIMENSION	
DN	DOWN	
DO	DOOR OPENING	
DR	DOOR	
DWG(S)	DRAWING(S)	
DWR	DRAWER	
E	EAST	
(E), EXIST	EXISTING	
EA	EACH	
E/G	EMERGENCY GENERATOR	
EJ	EXPANSION JOINT	
EL, ELEV	ELEVATION/ ELEVATOR	
ELEC	ELECTRICAL	
ENCL	ENCLOSURE	
EQ	EQUAL	
EQUIP	EQUIPMENT	
EXH	EXHAUST	
EXP	EXPANSION, EXPOSED	
EXT	EXTERIOR	
EWC	ELECTRIC WATER COOLER	
EP	EDGE OF PAVEMENT	
FA	FIRE ALARM	
FB	FLAT BAR	
FD	FLOOR DRAIN	
FF	FLOOR FINISH, FACTORY FINISH	
FDN	FOUNDATION	
FE	FIRE EXTINGUISHER	
FEC	FIRE EXTINGUISHER CABINET	
FH	FIRE HYDRANT	
FIN	FINISH	
FG	FINISH GRADE	
FLAM	FLAMMABLE	
FL, FLR	FLOOR	
FLUOR	FLUORESCENT	
FLG	FLASHING	
FOC	FACE OF CONCRETE	
FOS	FACE OF STUD	
FRMG	FRAMING	
FRP	FIBERGLASS REINFORCED PANEL	
FT	FOOT, FEET	
FTG(S)	FOOTING(S)	
FURR	FURRING	
FS	FINISH SURFACE, FLOOR SINK, FULL SIZE	
FR	FIRE RATED	
FSR	FIRE SPRINKLER RISER	
FO	FACE OF	
FOF	FACE OF FINISH	
GALV	GALVANIZED	
GA	GAUGE	
GB	GYPSUM BOARD, GRADE BREAK	
GBX	GYPSUM BOARD TYPE 'X'	
GI	GALVANIZED IRON	
GC	GENERAL CONTRACTOR	
GL	GLASS	
GOV	GOVERNMENT OWNED VEHICLES	
GR	GRADE	
GRD	GROUND	
GS	GALVANIZED STEEL	
GYP BD/GWB	GYPSUM BOARD	
HB	HOSE BIB	
HC	HANDICAP	
HC	HOLLOW CORE, HANDICAP COMPLIANT	
HDR	HEADER	
HDW	HARDWARE	
HGT, HT	HEIGHT	
HM	HOLLOW METAL	
HOR, HORIZ	HORIZONTAL	
HR	HOUR	
HP	HIGH POINT	
HW	HOT WATER	
INV	INVERT	
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS,	
ID	INSIDE DIMENSION, INSIDE DIAMETER	
IN	INCHES	
INFO	INFORMATION	
INSUL	INSULATION	
INT	INTERIOR	
IT	INFORMATION TECHNOLOGY	
INCL	INCLUDING	
JAN	JANITOR	
JST	JOIST	
JT	JOINT	
LF	LINEAR FEET	
LAB	LABORATORY	
LAV	LAVATORY	
LAM	LAMINATE	
LMB	LIQUID MARBLE BOARD	
LT	LIGHT	
LWR	LOWER	
MAN	MANUAL	
MAX	MAXIMUM	
MECH	MECHANICAL	
MED	MEDIUM	
MET, MTL	METAL	
MH	MANHOLE	
MISC	MISCELLANEOUS	
MLDG(S)	MOULDING(S)	
MO	MASONRY OPENING,	
MIN	MINIMUM	
MFR	MANUFACTURER	
MTD	MOUNTED	
MTG	MOUNTING	
MUL	MULLION	
(N), N	NORTH, NEW	
NOM	NOMINAL	
NIC	NOT IN CONTRACT	
NO.	NUMBER	
NRP	NON-REMOVABLE PIN	
NTS	NOT TO SCALE	
OC	ON CENTER	
OD	OUTSIDE DIAMETER, OUTSIDE DIMENSION, OVERFLOW DRAIN	
OH	OVER-HEAD	
OPNG	OPENING	
OPP	OPPOSITE	
PVC	POLYVINYL CHLORIDE	
PL	PROPERTY LINE	
PL	PLATE	
PLAM	PLASTIC LAMINATE	
PLAS	PLASTER	
PLBG	PLUMBING	
PROJ	PROJECT	
POV	PRIVATELY OWNED VEHICLES	
PR	PAIR	
PT	PAINT	
PTD	PAINTED	
PVMT	PAVEMENT	
QT	QUARRY TILE	
R	RISER, RADIUS	
RA	RETURN AIR	
RAD	RADIUS	
RB	RUBBER BASE	
RC	READINESS CENTER	
RCP	REFLECTED CEILING PLAN	
RD	ROOF DRAIN	
REFRIG	REFRIGERATION, REFRIGERATOR	
REF	REFERENCE	
REINF	REINFORCED	
REL	RELOCATE	
REQD	REQUIRED	
RH	ROUND HEAD	
RO	ROUGH OPENING	
RESIL	RESILIENT	
RM	ROOM	
RND	ROUND	
ROW	RIGHT OF WAY	
SA	SUPPLY AIR	
SB	SECURITY BOLT	
SBS	STYRENE-BUTADIENE-STYRENE	
SC	SOLID CORE	
SCH	SCHEDULE	
S	SINK, SOUTH	
SD	STORM DRAIN	
SEC	SECTION	
SHT	SHEET	
SM	SHEET METAL	
SML	SMALL	
SIM	SIMILAR	
SL	SLIDING	
SL	SCORE LINE	
SPEC(S)	SPECIFICATION(S)	
SQ	SQUARE	
STA	STATION	
STL	STEEL	
STD	STANDARD	
STOR	STORAGE	
STRUCT	STRUCTURAL, STRUCTURE	
SS	SERVICE SINK, SMOKE SEAL	
SSTL	STAINLESS STEEL	
SUSP	SUSPENDED	
SYS	SYSTEM	
SWBD	SWITCHBOARD	
SYM	SYMMETRICAL	
T	TRANSFORMER	
TR	TREAD	
TBA	TACKBOARD, TOWEL BAR, TOILET & BATH ROOM ACCESSORY	
TBL	TABLE	
T.O.	TOP OF	
T.O.C.	TOP OF CONCRETE, TOP OF CURB, TOP OF CATCH BASIN	
TEL	TELEPHONE	
TEMP	TEMPERED	
TER	TERRAZZO	
TG	TOP OF GRADE	
THK	THICK	
TOP	TOP OF PARAPET	
TPD	TOILET PAPER DISPENSER	
TV	TELEVISION	
TOW	TOP OF WALL	
TYP	TYPICAL	
TJ	TOOL JOINT	
TW	TREAD WIDTH	
UBC	UNIFORM BUILDING CODE	
UNO	UNLESS NOTED OTHERWISE	
UPR	UPPER	
UFC	UNIFIED FACILITIES CRITERIA	
US	UNITED STATES/ UNHEATED STORAGE	
VCT	VINYL COMPOSITION TILE	
VERT	VERTICAL	
VIF	VERIFY IN FIELD	
W	WEST, WIDTH	
W/	WITH	
WC	WATER CLOSET	
WD	WOOD	
WF	WIDE FLANGE	
WDO(S)	WINDOW(S)	
WH	WATER HEATER	
WIC	WOODWORK INSTITUTE OF CALIFORNIA	
WP	WEATHER-PROOF, WATER-PROOF	
WR	WATER RESISTANT	
WRGWB	WATER RESISTANT GYP WALL BD	
WS	WEATHER-SEAL	
WT	WEIGHT	
WWM	WELDED WIRE MESH	

1 ABBREVIATIONS (AS APPLICABLE)
SCALE: NONE



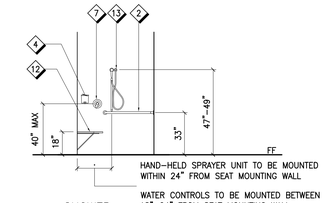
WATER CLOSET SIDE

WATER CLOSET FRONT

TOILET ROOM ACCESSORIES

TOILET ACCESSORY/FIXTURE SCHEDULE

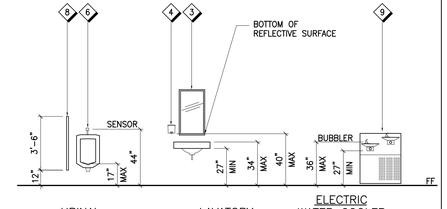
1. RECESSED WASTE RECEPTACLE
2. STAINLESS STEEL GRAB BARS
3. STAINLESS STEEL CHANNEL FRAMED MIRROR
4. SOAP DISPENSER
5. SANITARY NAPKIN / TAMPON VENDOR – WALL RECESSED
6. URINAL
7. SINGLE-LEVER MIXING VALVE
8. URINAL SCREEN
9. ELECTRIC WATER COOLER
10. SENSOR OPERATED PAPER TOWEL DISPENSER
11. WALL RECESSED/PARTITION MOUNTED COMBINATION TOILET SEAT COVER DISPENSER, DUAL ROLL TISSUE DISPENSER (WITH SANITARY NAPKIN DISPOSAL – WOMEN ONLY)
12. FOLDING SHOWER SEAT
13. SHOWER SPRAY UNIT WITH FLEXIBLE HOSE MIN 60" LONG



HAND-HELD SPRAYER UNIT TO BE MOUNTED WITHIN 24" FROM SEAT MOUNTING WALL

WATER CONTROLS TO BE MOUNTED BETWEEN 18"-24" FROM SEAT MOUNTING WALL

SHOWER



URINAL — LAVATORY — ELECTRIC WATER COOLER

NOTE: ACCESSIBLE STALL DOOR OPENINGS SHALL BE 34" CLEAR WITH DOOR OPEN

2 ACCESSIBLE FIXTURE MOUNTING HEIGHTS/LOCATIONS
SCALE: NONE

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

LICENSED ARCHITECT
PAUL LONGRO
C22255
EXP. 12/05
STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

SYMBOLS AND ABBREVIATIONS

AM-02

Designed By: RB
Drawn By: JC
Checked By: SD

Drawing No.
A004

USER NAME: cdburn
PLOT DATE: 08/27/2004 - 3:12PM
FILENAME: P:\F1W15401\700CADD\701ARCH\1541A004.dwg

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR		BASE		WALLS								CEILING		REMARKS
						NORTH		SOUTH		EAST		WEST				
		MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	
READINESS CENTER – FIRST FLOOR																
1101	LOBBY	RT	RT–1	RB	RB–1	GB	P/AWP–1	CW	FF	GB	P	GB/AWP	AWP–1	–	–	1
1102	STAIRS LOBBY	RT	RT–1	RB	RB–1	GB	P	CW	FF	GB	P	GB	P	GB	P	1
1103	ELEVATOR MACHINE ROOM	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	1
1104	IDF ROOM	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1105	ASSEMBLY HALL	EPXY	EPXY	EPXY	EPXY	GB/AWP	P/AWP–1	GB/AWP	P/AWP–1	GB/AWP	P/AWP–1	GB/AWP	P/AWP–1	AMD/EXP	–	1, 2
1106	756th STORAGE LOCKER ROOM	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1107	756th HEATED UNIT STORAGE	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1108	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1109	VAULT	CONC	SC	–	–	CONC	–	CONC	–	CONC	–	CONC	–	CONC	–	
1110	1184th HEATED UNIT STORAGE	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1111	VAULT	CONC	SC	–	–	CONC	–	CONC	–	CONC	–	CONC	–	CONC	–	
1112	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1113	1184th STORAGE LOCKER ROOM	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1114	MPOE	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	CONC	–	EXP	–	
1115	CORRIDOR	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–2	
1116	MECHANICAL ROOM	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	CONC	P	EXP	–	
1117	ELECTRICAL ROOM	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1118	FACILITY MAINTENANCE	CONC	SC	RB	RB–1	GB	P	GB	P	CONC	P	GB	P	EXP	–	
1119	BATTERY ROOM	EPXY	EPXY	EPXY	EPXY	CONC	–	GB	P	CONC	–	GB	P	EXP	–	
1120	TOOLS/SUPPLY ROOM	CONC	SC	RB	RB–1	CONC	–	GB	P	GB	P	GB	P	EXP	–	
1121	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1122	UNISEX TOILET	CT	CT–1	CT	CT–1	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB	P	SEE INTERIOR ELEVATIONS
1123	MAINTENANCE TRAINING BAY	CONC	SC	–	–	CONC	–	CONC	–	CONC	–	CONC	–	EXP	–	
1124	COVERED CAN WASH	CONC	SC	–	–	CONC	–	CONC	–	CONC	–	–	–	MET	FF	METAL CANOPY
1125	STORAGE	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	GB	P	
1126	CUSTODIAL	CONC	SC	RB	RB–1	MRGB	P	MRGB	P	MRGB	P	MRGB	P	MRGB	P	
1127	TOILET	CT	CT–1	CT	CT–1	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB	P	SEE INTERIOR ELEVATIONS
1128	OFFICE	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1129	KITCHEN	QT	QT	QT	QT	MRGB/CT	P/CT–4	MRGB/CT	P/CT–4	MRGB/CT	P/CT–4	MRGB/CT	P/CT–4	MRGB	P	
1130	SCULLERY	QT	QT	QT	QT	MRGB/CT	P/CT–4	MRGB/CT	P/CT–4	MRGB/CT	P/CT–4	MRGB/CT	P/CT–4	MRGB	P	
1131	TABLE & CHAIR STORAGE	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1132	MECHANICAL	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
1133	CUSTODIAL	CONC	SC	RB	RB–1	MRGB	P	MRGB	P	MRGB	P	MRGB	P	MRGB	P	
1134	HALLWAY	EPXY	EPXY	EPXY	EPXY	GB	P	GB	P	GB	P	–	–	ACST	SAT–2	
1135	MEN'S DRYING AREA	CT	CT–1	CT	CT–1	MRGB	P	MRGB	P	MRGB	P	MRGB	P	ACST	SAT–3	
1136	MEN'S SHOWER ROOM	CT	CT–1	CT	CT–1	CB/CT	CT–2	CB/CT	CT–2	CB/CT	CT–2	CB/CT	CT–2	MRGB	P	SEE INTERIOR ELEVATIONS
1137	MEN'S TOILET	CT	CT–1	CT	CT–1	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	ACST	SAT–3	SEE INTERIOR ELEVATIONS
1138	WOMEN'S DRYING AREA	CT	CT–1	CT	CT–1	MRGB	P	MRGB	P	MRGB	P	MRGB	P	ACST	SAT–3	
1139	WOMEN'S SHOWER ROOM	CT	CT–1	CT	CT–1	CB/CT	CT–2	CB/CT	CT–2	CB/CT	CT–2	CB/CT	CT–2	MRGB	P	SEE INTERIOR ELEVATIONS
1140	WOMEN'S TOILET	CT	CT–1	CT	CT–1	MRGB/CT	P/CT–2	MRGB/CT	P/CT–2	MRGB/CT	P	MRGB/CT	P/CT–2	ACST	SAT–3	SEE INTERIOR ELEVATIONS
1141	CORRIDOR	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–2	
1142	PHYSICAL FITNESS	RAF	RAF–1	RB	RB–1	GB	P	GB	P/MIR	GB	P/MIR	GB	P	ACST	SAT–3	MIRROR ON EAST WALL; SEE INT. ELEV.
1143	FAMILY READINESS OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1144	RECRUITING OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1145	LIBRARY/LEARNING	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
–	STAIR #1	RT	RT–1	RB	RB–1	–	–	CW	FF	–	–	GB/AWP	P/AWP–1	ACST	SAT–1	
–	STAIR #2	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–2	
READINESS CENTER – SECOND FLOOR																
1201	LOBBY	RT	RT–1	RB	RB–1	GB	P	CW	FF	GB/AWP	P/AWP–1	GB	P	ACST/GB	SAT–1/SAT–4/P	SEE REFLECTED CEILING PLAN
1202	ROOF ACCESS	CONC	SC	RB	RB–1	CONC	–	GB	P	GB	P	CONC	–	EXP	–	
1203	IT CLOSET	CONC	SC	RB	RB–1	CONC	–	GB	P	CONC	–	GB	P	EXP	–	
1204	IT CLOSET	CONC	SC	RB	RB–1	CONC	–	GB	P	GB	P	CONC	–	EXP	–	
1205	CORRIDOR	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–2	
1206	BREAK/ VENDING	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1207	1184th ADMIN.	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1208	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1209	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1210	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1211	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1212	CLASSROOM	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1213	MEN	CT	CT–1	CT	CT–1	MRGB/CT	CT–2	MRGB/CT	CT–2	MRGB/P, CB/CT	CT–2	MRGB/P, CB/CT	CT–2	MRGB	P	SEE INTERIOR ELEVATIONS
1214	CUSTODIAL	CONC	SC	RB	RB–1	MRGB	P	MRGB	P	MRGB	P	MRGB	P	EXP	–	
1215	WOMEN	CT	CT–1	CT	CT–1	MRGB/CT	CT–2	MRGB/CT	CT–2	MRGB/P, CB/CT	CT–2	MRGB/P, CB/CT	CT–2	MRGB	P	SEE INTERIOR ELEVATIONS
1216	CLASSROOM	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1217	CLASSROOM	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1218	CLASSROOM	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1219	CLASSROOM	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1220	AV STORAGE	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	P	
1221	TRAINING AID STORAGE	RT	RT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	P	
1222	MECHANICAL	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	P	
1223	IDF	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	P	
1224	CLASSROOM	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1225	CLASSROOM	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1226	756th ADMIN.	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	3
1227	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1228	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1229	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1230	OFFICE	CPT	CPT–1	RB	RB–1	GB	P	GB	P	GB	P	GB	P	ACST	SAT–3	
1231	ELECTRICAL	CONC	SC	RB	RB–1	GB	P	GB	P	GB	P	GB	P	EXP	–	
STORAGE BUILDING																
2101	1184th UNHEATED STORAGE	CONC	SC	–	–	MET	FF	MET	FF	MET	FF	MET	FF	MET	FF	2; PRE ENGINEERED BUILDING
2101	1184th UNHEATED STORAGE	CONC	SC	–	–	MET	FF	MET	FF	MET	FF	MET	FF	MET	FF	2; PRE ENGINEERED BUILDING
2103	CONTROLLED WASTE STORAGE	GRT	GRT	–	–	MET	FF	MET	FF	MET	FF	MET	FF	MET	FF	PREMANUFACTURED STORAGE UNIT
2104	FLAMMABLE MATERIALS STORAGE	GRT	GRT	–	–	MET	FF	MET	FF	MET	FF	MET	FF	MET	FF	PREMANUFACTURED STORAGE UNIT

ROOM FINISH LEGEND

MATERIAL ABBREVIATIONS

ACST	ACOUSTICAL SUSPENDED TILE
AMD	ACOUSTIC METAL DECK
AWP	ACOUSTIC WALL PANEL
CB	CEMENT BOARD
CONC	CONCRETE
CPT	CARPET
CT	CERAMIC TILE
CW	CURTAINWALL ASSEMBLY
EPXY	EPOXY FLOORING
EXP	EXPOSED STRUCTURE
FF	FACTORY FINISHED
GB	GYPSUM WALLBOARD (DRYWALL)
GRT	GALVANIZED STEEL GRATING
MET	METAL
MIR	MIRROR
MRGB	MOISTURE–RESISTANT GYPSUM BOARD
P	PAINT
QT	QUARRY TILE
RAF	RESILIENT ATHLETIC FLOORING
RB	RESILIENT BASE
RT	RESILIENT TILE
SAT	SUSPENDED ACOUSTIC CEILING SYSTEM
SC	SEALED CONCRETE

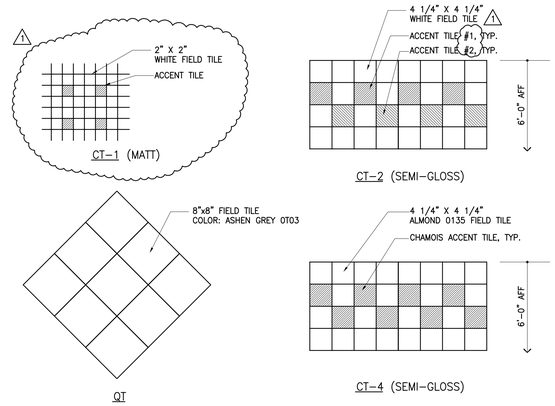
NOTES:

1. ALL GYPSUM BOARD SHALL BE TYPE–X.
2. ALL STEEL STRUCTURAL ELEMENTS BELOW 25 FEET HIGH SHALL BE COVERED WITH 1 HOUR FIRE–RATED CEMENTITIOUS FIREPROOFING.
3. ALL SUSPENDED ACOUSTICAL CEILING SYSTEM SHALL BE 9'–0" ABOVE FIN. FLR., U.N.O. AS EXPOSED STRUCTURE.
4. ALL TILT–UP CONCRETE PANEL WALLS SHALL BE OF INTEGRAL COLOR.

REMARKS:

1. REFER TO INTERIOR ELEVATIONS FOR AWP LOCATIONS
2. PAINT EXPOSED STEEL STRUCTURAL ELEMENTS, CONDUITS, PIPING TO MATCH ADJACENT WALL COLOR
3. CONTINUOUS RESILIENT CHAIR RAIL ON ALL WALLS OF CLASSROOM, @ 2'–6" ABOVE FF UNLESS NOTED OTHERWISE. ACROWYN OR APPROVED EQUAL RSE SERIES 4" RUB STRIPS, COLOR: 875 CORDOVAN

CERAMIC TILE PATTERN



NOTES:

1. SPECIFIED COLORS – BASED ON DAL–TILE PRODUCTS OR APPROVED EQUAL

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503–3400 FAX (714) 503–3999

Seal:

LICENSED ARCHITECT PAUL LONGRO C22255 EXP. 12/05 STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

ARMY NATIONAL GUARD

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

ROOM FINISH SCHEDULE

AM–02

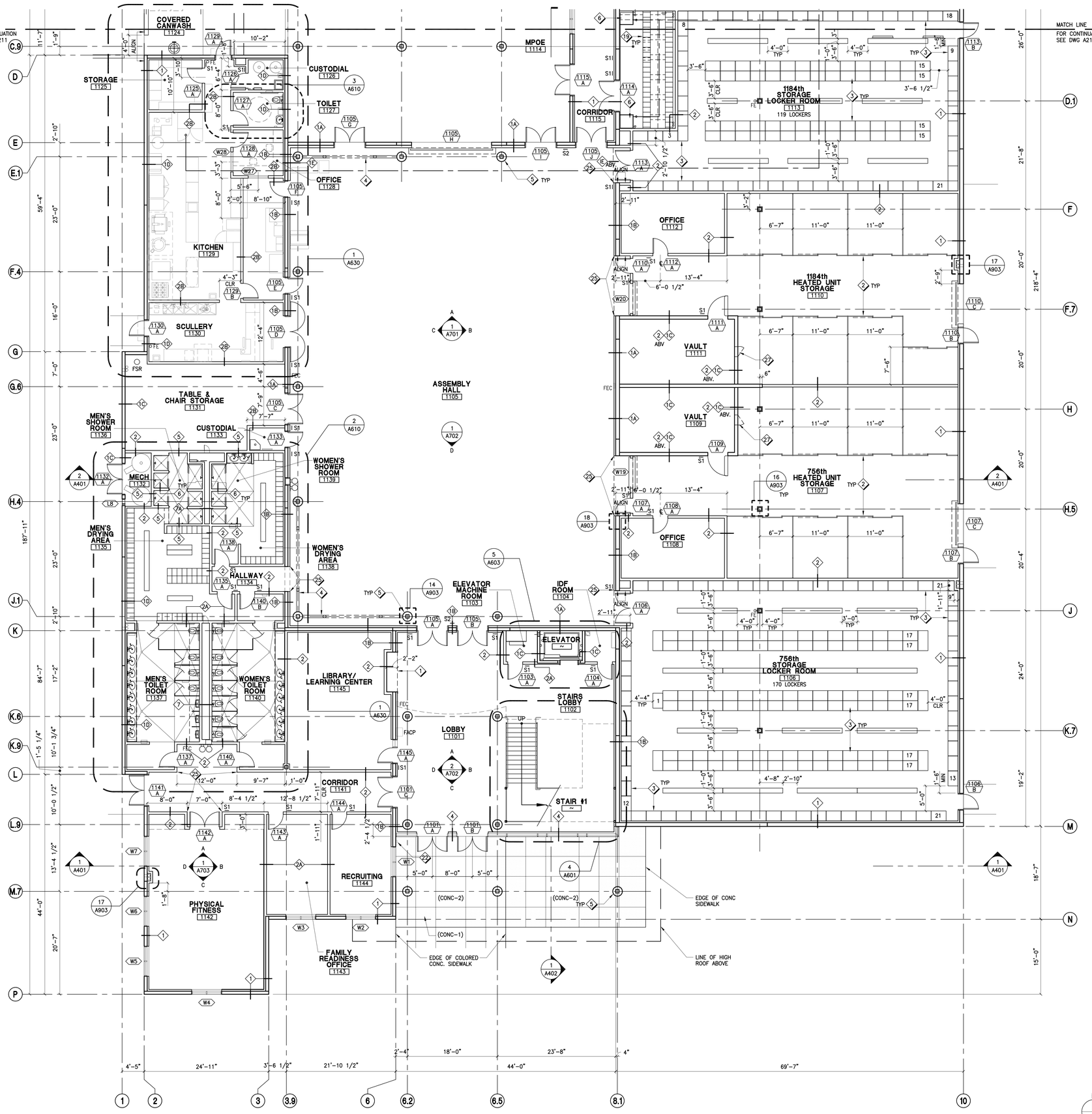
Designed By: RB
Drawn By: JC
Checked By: SD

Drawing No. **A005**

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200–25–153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: cdburn
PLOT DATE: 08/31/2004 – 1:45PM
FILENAME: P:\F1W15401\700CADD\701ARCH\1541A005.dwg



KEYNOTES

NOT ALL KEYNOTES ARE REFERENCED ON THIS SHEET

1. DISPLAY CASE
2. FULL HEIGHT WIRE MESH PARTITIONS
3. STORAGE LOCKERS AND BENCHES (BOI #8)
4. DIAGONAL BRACING, SEE STRUCTURAL DWGS
5. METAL COLUMN ENCLOSURE
6. CONDENSER, SEE MECHANICAL DWGS
7. BOILER, SEE MECHANICAL DWGS
8. MODULAR FURNITURE (NIC)
9. MARKERBOARD/TACKBOARD/PROJECTION SCREEN (BOI #6)
10. FOLDING PARTITION (BOI #7)
11. HI-LO ELECTRIC WATER COOLER
12. MOP SINK, SEE PLUMBING DWGS
13. VENDING MACHINES (NIC)
14. FURNISHINGS (NIC)
15. SBS MODIFIED BITUMINUOUS MEMBRANE ROOFING SYSTEM
16. ROOFTOP AIR HANDLING UNIT, SEE MECHANICAL DWGS
17. ROOF TRAFFIC PAD
18. WALL-MOUNTED KEY CABINET @ 48" AFF
19. EQUIPMENT RACK (NIC)
20. MECHANICAL PUMPS, SEE MECHANICAL DWGS
21. WATER HEATER, SEE PLUMBING DWGS
22. KNOX BOX (3200 SERIES SURFACE MOUNT)
23. MECHANICAL STORAGE TANK, SEE MECHANICAL DWGS.
24. FLOOR OPENING, SEE STRUCTURAL DWGS
25. WALL CORNERGUARDS, SEE DETAIL 13/A903
26. ROOF DOWNSPOUT, COLOR TO MATCH EXTERIOR WALL
27. ABOVE VAULT 2' X 4' ACCESS DOOR, BOTTOM OF DOOR SHALL BE AT TOP OF VAULT
28. WALL-MOUNTED EMERGENCY EYEWASH KIT: UNI-GUARD SINGLE 16 OZ. OR APPROVED EQUAL
29. WATER SOFTNER, SEE PLUMBING DWGS.
30. ONE HOUR FIRE-RATED 2' X 4' ACCESS DOOR

LEGEND

- S# — WALL SIGNAGE, SEE DWG A007
- FE — FIRE EXTINGUISHER (BRACKET-MTD)
- FEC — FIRE EXTINGUISHER CABINET SEE DETAIL 11/A903
- FACP — FIRE ALARM CONTROL PANEL
- FSR — FIRE SPRINKLER RISER
- X — PARTITION TYPES, SEE DWG A008

NOTES

1. THROUGH WALL PENETRATIONS INCLUDING FIRE RATED WALL, SEE DETAILS 5,6,7,8 ON DWG A903
2. ALL DIMENSIONS ARE SHOWN TO FACE OF CONCRETE WALL OR TO FACE OF STUDS, UNLESS OTHERWISE NOTED AS CLEAR

1 FIRST FLOOR PLAN - SECTOR 2
SCALE: 1/8"=1'-0"

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: ALee
PLOT DATE: 09/01/2004 - 11:04AM
FILENAME: P:\F1W15401\700CADD\701ARCH\1541A212.dwg

P:\F1W15401\700CADD\701ARCH\1541A212.dwg, 9/1/2004 11:04:23 AM, Acrobat Distiller.pc3

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

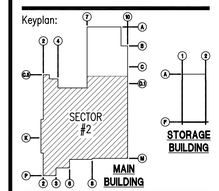
LICENSED ARCHITECT PAUL LONGRO C22255 EXP. 12/05 STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:



Scale: 0 8' 16' 24'
SCALE: 1/8"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
ENLARGED FIRST FLOOR PLAN SECTOR 2

AM-02

Designed By: RB
Drawn By: JE
Checked By: SD

Drawing No. A212

STRUCTURAL GENERAL NOTES

GENERAL:

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK, AND THE ENGINEER/ARCHITECT SHALL BE NOTIFIED, IN WRITING, IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES. IN NO CASE SHALL DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAIL ON THESE DRAWINGS. THESE NOTES SHALL BE CONSIDERED AS PART OF THE WRITTEN SPECIFICATIONS.
2. ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND C.O.R. BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
3. RESOLVE ANY CONFLICTS ON THE DRAWINGS WITH THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. STRUCTURAL DRAWINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL DRAWINGS.
4. WHERE A CONSTRUCTION DETAIL IS NOT SHOWN OR NOTED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
5. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER "GENERAL NOTES" AND TYPICAL DETAILS.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE PROSECUTION OF THIS WORK
8. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
9. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO: BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, TEMPORARY STRUCTURES, AND PARTIALLY COMPLETED WORK, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
10. SPECIFICATIONS, CODES AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS SHALL BE OF THE LATEST APPROVED ISSUE, INCLUDING SUPPLEMENTS, UNLESS OTHERWISE NOTED. MATERIAL SPECIFICATIONS ARE (ASTM) LATEST EDITION, UNLESS NOTED OTHERWISE.
12. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
    A. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL, ROOF AND FLOOR OPENINGS, ETC., NOT SHOWN OR NOTED.
    B. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
    C. ANCHORAGE AND BRACING FOR ELECTRICAL, MECHANICAL OR PLUMBING EQUIPMENT.
    D. ANCHOR BOLTS FOR MOTOR MOUNTS.
    E. SIZE AND LOCATION OF MACHINE AND EQUIPMENT BASES.
13. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
    A. SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS.
    B. SIZE AND LOCATION OF ALL NONBEARING PARTITIONS.
    C. SIZE AND LOCATION OF ALL CONCRETE CURBS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGES IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
    D. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS.
    E. STAIR FRAMING AND DETAILS.
    F. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
14. ALL WORK SHALL CONFORM TO THE STANDARDS OF FOLLOWING CODES: UNIFORM BUILDING CODE (UBC), 1997 EDITION WITH CALIFORNIA AMENDMENTS, WHICH MAKE UP THE CALIFORNIA CODE OF REGULATIONS TITLE 24 PART 2 REFERRED TO HERE AS THE CALIFORNIA BUILDING CODE, 2001 EDITION OR "THE CODE," AND ANY OTHER REGULATING AGENCIES WHICH MAY HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE CODES AND STANDARDS LISTED IN THE STRUCTURAL NOTES AND SPECIFICATIONS.
15. DESIGN LIVE LOADS:

AREA	DESIGN LIVE LOAD	REMARKS
ROOF	20 PSF	NON-REDUCIBLE
OFFICE/CLASSROOMS	80 PSF	REDUCIBLE
EXITS, CORRIDORS & PUBLIC AREAS	100 PSF	NON-REDUCIBLE
MECHANICAL AREA	125 PSF	NON-REDUCIBLE
PARTITIONS	20 PSF	NON-REDUCIBLE

16. WIND PRESSURE BASED ON 70 MPH, EXPOSURE C. IMPORTANCE FACTOR I=1.0

SEISMIC PARAMETERS:

THE SEISMIC PARAMETERS FOR THE DESIGN OF THE BUILDING BASED ON 2001 CBC ARE AS FOLLOW:

SEISMIC ZONE	4
SOIL PROFILE TYPE	S_D
SEISMIC ZONE FACTOR	0.4
SEISMIC COEFFICIENT, C_a	0.44
SEISMIC COEFFICIENT, C_v	0.64
IMPORTANCE FACTOR, I	1.0
NEAR SOURCE FACTOR, N_a	1.0
NEAR SOURCE FACTOR, N_v	1.1

STRUCTURAL AND MISC. STEEL:

1. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NINTH EDITION OF THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. STRUCTURAL STEEL SHALL CONFORM TO ASTM A 36, UNLESS OTHERWISE NOTED. STRUCTURAL W SHAPES SHALL CONFORM TO ASTM A992, GRADE 50ksi.
3. STEEL PIPES SHALL CONFORM TO ASTM A 53, TYPE E OR S, GRADE "B".
4. STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A 500, GRADE "B", Fy=46 KSI.
5. MACHINE BOLTS AND ANCHOR BOLTS SHALL BE GRADE "A" CONFORMING TO ASTM A 307, UNLESS OTHERWISE NOTED.
6. NUTS FOR MACHINE BOLTS SHALL CONFORM TO ASTM A 563, HEX GRADE A.
7. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A 325 OR ASTM A490 AND SHALL BE INSTALLED PER THE REQUIREMENTS OF THE AISC SPECIFICATION FOR "STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS."
8. SPECIAL INSPECTION IS REQUIRED PER CBC 1701A.5.6 FOR INSTALLATION OF HIGH STRENGTH BOLTS.
9. NUTS FOR HIGH-STRENGTH BOLTS SHALL BE HEAVY HEX, GRADE C, CONFORMING TO ASTM A 563.
10. SHOP DRAWINGS FOR STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.

METAL BUILDING:

1. METAL BUILDING REGISTERED (CIVIL OR STRUCTURAL) ENGINEER TO VERIFY THE DESIGN OF THE FOUNDATIONS (BY KLT) FOR THE STORAGE BUILDING. SHOW ROOF LIVE LOADS, WIND AND EARTHQUAKE LOADS, DESIGN CODES, MINIMUM DEPTH OF FOOTINGS (SEE SOIL REPORT), OVER EXCAVATION, TYPE OF FILLING AND BACK FILLING.

STRUCTURAL AND MISC. STEEL: (CONTIUNED)

11. NON-SHRINK GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 7,000 PSI PER ASTM C 109. NON-SHRINK GROUT SHALL BE MASTER BUILDERS MASTERFLOW 713 OR 928 GROUT OR APPROVED EQUAL. GROUTING OF BASE PLATES PRIOR TO ALIGNMENT OF COLUMNS SHALL NOT BE PERMITTED.
12. ALL WELDING SHALL BE DONE BY THE SHIELDED ARC PROCESS USING APPROVED ELECTRODES PER AWS SPECIFICATION E70XX (LOW HYDROGEN ELECTRODES) WITH CHARPY V-NOTCH TOUGHNESS OF 20 FOOT POUNDS AT ZERO DEGREE FAHRENHEIT. WELDING SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1 AND SHALL BE PERFORMED BY CERTIFIED WELDERS QUALIFIED UNDER THE PROCEDURES CONTAINED THEREIN. COMPLY WITH TITLE 24 SECTION 2205.10.
13. BOLT HOLES IN STEEL SHALL BE DRILLED 1/16" LARGER DIAMETER THAN NOMINAL SIZE OF BOLT USED, EXCEPT AS NOTED OTHERWISE.
14. ALL STEEL EXPOSED TO WEATHER OR MOISTURE CONDITIONS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. AREAS THAT HAVE BEEN FIELD WELDED SHALL BE COATED WITH "REGALV", "GALVALLOY", OR AN APPROVED EQUAL.
15. HIGH-STRENGTH BOLTS
    A. HIGH-STRENGTH BOLTS SHALL BE INSTALLED, TIGHTENED AND INSPECTED IN STRICT ACCORDANCE WITH ASTM A325. THREADS SHALL BE EXCLUDED FROM ALL SHEAR PLANES. CONTACT SURFACES OR MEMBERS TO BE BOLTED SHALL NOT BE PAINTED.
    B. ALL HIGH-STRENGTH BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH PARAGRAPH 5E, "TIGHTENING BY USE OF DIRECT TENSION INDICATOR" OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A 325 OR A 490 BOLTS AS APPROVED BY THE RESEARCH COUNCIL ON RIVETED AND BOLTED STRUCTURAL JOINTS AND ENDORSED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION. LOAD INDICATOR WASHERS SHALL BE USED AS THE APPROVED DIRECT TENSION INDICATORS.
16. STEEL TO BE SHOP PRIMED EXCEPT AREAS TO BE FIELD WELDED OR IN CONTACT WITH CONCRETE. 1

REINFORCED CONCRETE:

1. CEMENT SHALL CONFORM TO ASTM C 150, TYPE II, LOW ALKALI.
2. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C-33. SUPPLIES OF AGGREGATE SHALL PROVIDE EVIDENCE THAT THE AGGREGATE IS FREE OF DELETERIOUS REACTIVITY.
3. AGGREGATES FOR LIGHTWEIGHT CONCRETE SHALL CONFORM TO ASTM C-330. SUPPLIES OF AGGREGATE SHALL PROVIDE EVIDENCE THAT THE AGGREGATE IS FREE OF DELETERIOUS REACTIVITY. MAXIMUM AGGREGATE SIZE IS 3/4".
4. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C-94. MAX WATER/CEMENTITIOUS MATERIALS RATIO BY WEIGHT SHALL BE 0.50 AND MAXIMUM SLUMP IS 4 INCHES.
5. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE", EXCEPT AS MODIFIED BY THESE NOTES.
6. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS.

a) STRUCTURAL LT. WT.:	3,000 PSI	(SEE NOTE #7)	3/4"
b) FOOTINGS	3,500 PSI	1	1-1/2"
c) SLAB ON GRADE	4,000 PSI		1"
d) WALLS & PRECAST PNLS	3,000 PSI	(SEE DWG S300)	1"
e) ALL OTHER CONCRETE	4,500 PSI		1"

7. ALL STRUCTURAL LIGHTWEIGHT CONCRETE SHALL HAVE A DENSITY OF 110 PCF MINIMUM AND 115 PCF MAXIMUM.
8. ADMIXTURES SHALL COMPLY WITH ASTM A 494 AND BE TYPE THAT INCREASES THE WORKABILITY OF THE CONCRETE, BUT SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT. (CALCIUM CHLORIDE SHALL NOT BE USED).
9. NO CONDUIT PLACED IN A CONCRETE SLAB SHALL HAVE AN OUTSIDE DIAMETER GREATER THAN 1/3 THE THICKNESS OF THE SLAB. NO CONDUIT SHALL BE EMBEDDED IN A SLAB THAT IS LESS THAN 3-1/2" THICK. EXCEPT FOR LOCAL OFFSETS, MINIMUM CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 6".
10. PROJECTING CORNERS OF SLABS, BEAMS, WALLS, COLUMNS, ETC., SHALL BE FORMED WITH A 1/2" CHAMFER UNLESS OTHERWISE NOTED.
11. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, CLIPS, ORNAMENTS OR GROUNDS REQUIRED TO BE CAST INTO CONCRETE.
12. CONSTRUCTION JOINTS FOR CAST-IN-PLACE CONCRETE SLAB AND WALLS SHALL BE IN ACCORDANCE WITH ACI 301, PARAGRAPH 5.3.2.6.
13. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318, LATEST APPROVED EDITION), WITH MODIFICATIONS AS NOTED ON THE DRAWINGS OR SPECIFICATIONS.
14. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO USE. THE CONCRETE MIX DESIGN SHALL STATE THE SOURCE OF THE AGGREGATES AND SHALL INCLUDE AN AFFIDAVIT THAT THE AGGREGATE IS NOT EXPANSIVE OR OTHERWISE CHEMICALLY DETRIMENTAL.
15. NON-SHRINK GROUT SHALL BE USED UNDER BASE PLATES, AND WALL PANELS, U.N.O.
16. THE DESIGN MUST BE APPROVED BY THE C.O.R. PRIOR TO THE MANUFACTURER OF THE PANEL AND SHALL BE DESIGN IN ACCORDANCE WITH ACI 318-02 CHAPTER 16 (OR LATEST EDITION). 1

REINFORCED CONCRETE: (CONTINUED)

16. CLEARANCE
    A. PRESERVE CLEARANCE BETWEEN BARS OF NOT LESS THAN THE NOMINAL DIAMETER OF THE BARS.
    B. IN NO CASE SHALL THE CLEAR DISTANCE BE LESS THAN 1 INCH OR LESS THAN 1-1/3 TIMES THE MAXIMUM SIZE OF AGGREGATE, WHICHEVER IS GREATER.
    C. MINIMUM CLEAR DISTANCES BETWEEN REINFORCING STEEL AND FACE OF CONCRETE ARE AS FOLLOWS, UNLESS NOTED OTHERWISE:
    1. CONCRETE DEPOSITED AGAINST EARTH: 3"
    2. CONCRETE SURFACE (FORMED) EXPOSED TO EARTH OR WEATHER:
       #6 THROUGH #18 BARS: 2"
       #5 BAR AND SMALLER: 1 1/2"
    3. CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
       a. SLABS, WALLS, JOISTS:
          #14 THROUGH #18 BARS: 1 1/2"
          #11 BAR AND SMALLER: 3/4"
       b. BEAMS, COLUMNS:
          PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS: 1 1/2"
       c. PLACE TEMPERATURE REINFORCING FOR SLABS ON GRADE AT 1 1/2 INCHES FROM TOP OF SURFACE.
       d. PRECAST WALLS AS DETAILED
17. ALL REINFORCING BARS, ANCHOR BOLTS, DOWELS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
18. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS.
19. CURING COMPOUND USED ON CONCRETE THAT IS TO RECEIVE A RESILIENT TILE FINISH SHALL BE APPROVED BY THE TILE MANUFACTURER BEFORE USE.

REINFORCING STEEL:

1. BAR REINFORCEMENT SHALL BE ASTM A 615, GRADE 40 FOR #3 AND GRADE 60 FOR #4 AND LARGER UNLESS OTHERWISE NOTED. ALL REINFORCING SHALL BE FROM IDENTIFIED STOCK WITH MILL ANALYSIS. REINFORCEMENT TO BE WELDED SHALL BE ASTM A706 ONLY
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
3. A. LAP SPLICED OF REINFORCING BARS IN CONCRETE SHALL BE CLASS B AS DEFINED IN ACI 318-95 UNLESS OTHERWISE NOTED.
   B. LAP SPLICES OF REINFORCING BARS IN MASONRY SHALL BE 48 BAR DIAMETERS OR 2'-6" MIN UNLESS NOTED OTHERWISE.
4. REINFORCING, DETAILING, BENDING, AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", LATEST EDITION, AND ACI DETAILING MANUAL 315 (LATEST EDITION).
5. DOWELS BETWEEN FOOTING AND WALLS SHALL BE OF THE SAME GRADE, SIZE AND SPACING AS VERTICAL WALL REINFORCING, UNLESS OTHERWISE NOTED.
6. FURNISH #3 SPACE TIES AT APPROXIMATELY 2'-6" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING IN PLACE UNLESS OTHERWISE NOTED.
7. ALL REINFORCING BAR BENDS SHALL BE MADE COLD. #5 OR LARGER BARS SHALL NOT BE RE-BENT WITHOUT APPROVAL FROM STRUCTURAL ENGINEER.
8. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6" OR ONE FULL MESH, WHICHEVER IS GREATER.
9. SPLICES IN ADJACENT HORIZONTAL WALL REINFORCEMENT SHALL BE STAGGERED 4'-0" MINIMUM UNLESS NOTED OTHERWISE.
10. ALL REINFORCING STEEL, DOWELS, ANCHOR BOLTS, ETC. SHALL BE WELL SECURED IN PLACE PRIOR TO PLACING CONCRETE OR GROUT. CONTRACTOR SHALL USE TEMPLATE TO INSURE ACCURATE PLACEMENT OF ANCHOR BOLTS, DOWELS, ETC.
11. WELDING OF REINFORCING BARS SHALL CONFORM TO AWS D1.4. E70XX ELECTRODES SHALL BE USED IN WELDING GRADE 40 REBAR. E90XX ELECTRODES SHALL BE USED IN WELDING GRADE 60 REBAR. A COPY OF THE MILL TEST REPORT SHALL BE SENT TO THE STRUCTURAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL IN CONCRETE MEMBERS. SPECIAL INSPECTION IS REQUIRED FOR ALL WELDING. WELDED REBAR SHALL BE ASTM A-706.

STEEL JOIST:

1. STEEL JOIST SHALL MEET THE REQUIREMENTS OF STEEL JOIST INSTITUTE'S "STANDARD SPECIFICATIONS, LOAD TABLES & WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS". THE BOTTOM CHORD OF THE JOIST SHALL BE DESIGNED TO CARRY 100 POUND PER LINEAR FOOT OF UNIFORM LOAD AS A PART OF THE TOTAL SPECIFIED JOIST LOAD.
2. MINIMUM BRIDGING SHALL BE PROVIDED IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE'S SPECIFICATIONS. BRIDGING IN EXCESS OF THE MINIMUM SHALL BE PROVIDED WHERE INDICATED ON THE DESIGN DRAWINGS.
3. UNLESS AS DETAILED ON THE STRUCTURAL DRAWINGS, POINT LOADS FROM CEILINGS, PIPES, DUCTS, LIGHTS, ELECTRICAL TRAYS, CONDUITS, SPRINKLERS, ETC. OF 100 POUNDS OR GREATER SHALL BE SUPPORTED FROM STEEL JOISTS AT PANEL POINTS ONLY. IN NO CASE SHALL THESE LOADS EXCEED A UNIFORM LOAD OF 10 PSF.

FOUNDATION:

1. SOIL REPORT PREPARED BY: PATEL & ASSOC. INC.
   DATE: 6-1-2004
   PROJECT NO.: 07940504
2. ALL SUBGRADE PREPARATION FOR PAVEMENTS, FOOTING AND SLAB SHALL BE IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS IN THE SAID SOIL REPORT.
3. DESIGN SOIL BEARING: 1800 PSF
4. ALL FOOTING EXCAVATION SHALL BE INSPECTED AND APPROVED BY THE SOIL ENGINEER PRIOR TO POUR ANY FOOTING CONCRETE.
5. ALL FOUNDATION SHALL BE FOUNDED 24" INCHES MINIMUM BELOW THE LOWEST ADJACENT GROUND SURFACE.

PRECAST CONCRETE PANELS:

1. ALL PANELS ARE VIEWED FROM INTERIOR, UNLESS NOTED OTHERWISE.
2. PANEL REINFORCEMENT IS CALLED OUT ON PANEL TYPES. ADDITIONAL PANEL REINFORCEMENT MAY BE CALLED OUT ON THE PANEL ELEVATIONS.
3. CONCRETE PANELS ARE 9 1/4" THICK FOR BUILDING UNLESS NOTED OTHERWISE ON THE PANEL ELEVATIONS OR TYPICAL PANEL REINFORCEMENT DRAWINGS.
4. MISCELLANEOUS STEEL FOR PANEL CONNECTIONS TO CONFORM TO ASTM A-36 STEEL.
5. SEE ARCHITECTURAL DRAWINGS FOR DESIGN REVEALS AND FORMLINERS.
6. VERIFY ALL REQUIRED OPENINGS WITH RELATED ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
7. PANEL JOINTS SHALL BE SEALED WITH 1/2" DIAMETER BUTYL ROD AND THIOKOL AT EXTERIOR AND INTERIOR FACE OF PANELS.
8. THE BOTTOM OF OVERFLOW SCUPPER DRAIN OPENINGS TO BE SET 2" ABOVE ADJACENT ROOF LOW POINT.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PLACEMENT OF ALL LIFTING POINTS AND ADDITIONAL REINFORCEMENT OR STRONGBACKS REQUIRED TO ADEQUATELY TILT THE PRECAST CONCRETE PANELS. THE LIFT DESIGN SHALL BE BASED ON THE STRENGTH OF THE CONCRETE SPECIFIED BY THE STRUCTURAL DRAWINGS MODIFIED FOR THE EXPECTED TIME OF LIFT. CONTRACTOR MUST ALSO SUBMIT TO THE GOVERNMENT PRIOR TO TILTING UP, COPIES OF TEST REPORTS DONE TO SHOW THAT THE PANEL CONCRETE HAS ATTAINED THE STRENGTH REQUIRED BY THE LIFT DESIGN. 1
12. PANELS SHALL NOT BE LIFTED UNTIL CONCRETE HAS ATTAINED STRENGTH OF 2000 PSI (FOR 3000 PSI CONC.) OR 3000 PSI (FOR 4000 PSI CONC.) AS VERIFIED BY CYLINDER TESTING.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL BRACING REQUIRED FOR PRECAST PANELS PRIOR TO CONNECTION OF ALL SUPPORTING ELEMENTS SUCH AS ROOF DECK AND FLOOR SLAB. SUCH BRACING MUST BE DESIGNED TO RESIST THE MAXIMUM SHORT TERM WIND LOADS FOR THE BUILDING IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE AND ANY LOCAL ORDINANCES. BRACING AND WIND LOADS MUST BE CLEARLY SHOWN ON SHOP DRAWINGS.

BACKFILLING:

1. ALL BACKFILL SHALL CONFORM TO THE SOIL REPORT AND RECOMMENDATIONS
2. UTILITY TRENCH BACKFILL AND ANY OTHER BACKFILL MUST BE MECHANICALLY COMPACTED. JETTING AND FLOODING SHALL NOT BE PERMITTED.
3. BACKFILL AT PERIMETER OF STRUCTURE IS NOT TO BE MADE UNTIL GROUT UNDER PANELS IS INSPECTED BY THE C.O.R.
4. WHERE WALLS ARE BACKFILLED ON ONE SIDE ONLY, PROVIDE SHORING OR OTHER APPROVED MEANS OF LATERAL SUPPORT UNTIL RESISTING ELEMENTS ARE IN PLACE AND HAVE ATTAINED THERE REQUIRED STRENGTHS. RESISTING ELEMENTS SHALL BE CONCRETE SLABS OR OTHER PERMANENT BUILDING COMPONENTS.
5. ALL FILLS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 3.3.11.7 OF THE SOIL REPORT AND CBC APPENDIX SECTION 3313.
6. UNLESS NOTED OTHERWISE, ALL FILL SHALL BE PLACED IN MAXIMUM 8" LAYERS.
7. COMPACTION REPORT SHALL BE SUBMITTED TO AND APPROVED BY THE C.O.R.

METAL DECKING:

1. METAL DECK AND ACCESSORIES SHALL BE FORMED FROM STEEL SHEETS CONFORM TO ASTM A-446, GRADE A OR HIGHER SPECIFICATIONS, DECK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-525, COMMERCIAL COATING CLASS G-60.
2. STEEL FLOOR DECK SHALL BE FORMED WITH INTEGRAL LOCKING LUGSOR EMBOSSMENTS TO PROVIDE A MECHANICAL LOCK BETWEEN THE STEEL DECK AND THE CONCRETE SLAB TO PROVIDE A COMPOSITE UNITS.
3. METAL DECKS SHALL HAVE THE FOLLOWING MINIMUM SECTION PROPERTIES PER FOOT:

LOCATION	DEPTH x GA.	I (IN.4)	+S(IN.3)	-S(IN.3)
ROOF:	1 1/2" x 20	0.216	0.235	0.248
FLOOR:	2" x 20	0.423	0.361	0.370

4. WHEN SUBMITTING SHOP DRAWINGS, INCLUDE ICBO NUMBER AND REPORT
5. DECK SHALL HAVE MINIMUM 2" BEARING AT SUPPORTS.
6. DECK UNITS SHALL BE 3 SPAN CONTINUOUS WHEREVER POSSIBLE.
7. PLACING OF DECK UNITS SHALL BE ARRANGED SO THAT END LAPS ARE STAGGERED.
8. WELDING OF DECK SHALL BE CONTINUOUSLY INSPECTED BY A CERTIFIED INSPECTOR.
9. CUTTING AND FRAMING OF OPENINGS FOR OTHER TRADE SHALL BE THE RESPONSIBILITY OF THE TRADES INVOLVED. HOLES THAT ARE DIMENSIONED ON THE STRUCTURAL DRAWINGS SHALL BE THE RESPONSIBILITY OF THE DECK ERECTOR.

SPECIAL INSPECTION/ INSPECTOR REQUIREMENTS: (CBC1701)

1. INSPECTOR: EMPLOYED BY THE CONTRACTOR, APPROVED BY C.O.R. (CBC 1701.1).
2. THE SPECIAL INSPECTION MAY BE PERIODICAL DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED.
3. RESPONSIBILITY: IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INFORM THE SPECIAL INSPECTOR OR INSPECTION AGENCY PRIOR TO PERFORMING ANY WORK THAT REQUIRES INSPECTION.
4. SUMMARY OF STRUCTURAL INSPECTIONS:

   THE CONSTRUCTION INSPECTIONS SHALL INCLUDE THE INSPECTIONS REQUIRED BY CBC SECTION 108 AND THE LISTED SPECIAL INSPECTION.

   4.1 CONCRETE (CBC 1701.5.1): DURING THE TAKING OF TEST SPECIMEN AND PLACING OF REINFORCED CONCRETE.

   4.2 REINFORCING STEEL (CBC 1701.5.4): PRIOR TO CLOSING OF THE FORMS AND DELIVERY OF CONCRETE FOR ALL CONCRETE SPECIFIED TO HAVE SPECIAL INSPECTION.

   4.3 STRUCTURAL WELDING OTHER THAN WELDING DONE IN AND APPROVED FABRICATOR'S SHOP IN ACCORDANCE WITH CBC SECTION 1701.5.5.

   4.4 CONCRETE ANCHORS: CONTINUOUS INSPECTION FOR ALL EXPANSION ANCHORS OR ADHESIVE ANCHOR BOLT INSTALLATION.

   4.5 STRUCTURAL WELDING: INSPECT ALL FIELD WELDS TO THE STRUCTURAL STEEL, INCLUDING ROOF AND FLOOR DECK WELDING. (CBC 1701.5.5).

   4.6 HIGH-STRENGTH BOLTING: AS REQUIRED BY CBC CHAPTER 22, DIVISION IV (CBC 1701.5.6).

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

GENERAL NOTES

AM-02

Designed By:
Drawn By:
Checked By:

Drawing No.
S100

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:09PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S100.dwg

P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S100.dwg, 9/1/2004 2:09:21 PM, Acrobat Distiller.pc3

STRUCTURAL LEGENDS

MATERIALS:

EARTH, ETC — EARTH, GRAVEL

CONCRETE, ETC — CONCRETE, SAND

METALS — STEEL

STRUCT STEEL — W BM, TUBE, PIPE, CHANNEL, ANGLE, STEEL TRUSS

MASONRY — BLOCK (CMU), BRICK

REFERENCE:

SECTION KEY — 1 / S-5.1 — SECTION DESIGNATION; SHEET ON WHICH SECTION IS DRAWN

ELEVATION KEY — A / S-3.1 — ELEVATION DESIGNATION; SHEET ON WHICH ELEVATION IS DRAWN

DETAIL KEY — 1 / S-5.1 — DETAIL DESIGNATION; SHEET ON WHICH DETAIL IS DRAWN

NORTH ARROW — N

ELEVATION SYMBOL — FF @ FIRST LEVEL EL. 0'-00"

FOOTING TYPE — A

1 — INDICATES BOLT IN PLAN AND/OR ELEVATION

4 — PANEL NUMBER

E1 — EQUIPMENT ENCLOSURE PANEL NUMBER

T1 — TRASH ENCLOSURE PANEL NUMBER

V5 — VAULT PANEL NUMBER

STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ARCH	ARCHITECTURAL, ARCHITECT
BM	BEAM
BOF	BOTTOM OF FOOTING
BOI	BID OPTIONAL ITEM
BOTT	BOTTOM
BP	BASE PLATE
BRCG	BRACING
BRDG	BRIDGING
BRG	BEARING
BLDG	BUILDING
CBC	CALIFORNIA BUILDING CODE
CJ	CONTROL JOINT
℄	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
C.O.R.	CONTRACTING OFFICER REPRESENTATIVE
CP	COMPLETE PENETRATION WELD
CSJ	CONSTRUCTION JOINT
CSK	COUNTERSINK
CTRD	CENTERED
DBL	DOUBLE
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DN	DOWN
DO	DITTO
DWG	DRAWING
DWL	DOWEL
(E)	EXISTING
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEV	ELEVATION
EN	EDGE NAILING
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EXP	EXPANSION
EXT	EXTERIOR
FIN	FINISH
FDN	FOUNDATION
FF	FINISH FLOOR
FLR	FLOOR
FN	FIELD NAILING
FOS	FACE OF STUD
FRMG	FRAMING
FS	FAR SIDE
FTG	FOOTING
GALV	GALVANIZED
GB	GRADE BEAM
GRTG	GRATING
HDR	HEADER
HGR	HANGER
HORIZ	HORIZONTAL
HP	HIGH POINT
HR	HANDRAIL
HS	HIGH STRENGTH
JNT	JOINT
JST	JOIST
L	LENGTH
LLH	LONG LEG HORIZONTAL
LT	LIGHT
LLV	LONG LEG VERTICAL
LOC	LOCATION
LP	LOW POINT
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT (A307 BOLT)
MFR	MANUFACTURER
MIN	MINIMUM
MEZZ	MEZZANINE
MSL	MEAN SEA LEVEL
MTL	METAL
(N)	NEW
NS	NEAR SIDE
OC	ON CENTER
OH	OPPOSITE HAND
OPN'G	OPENING
PCF	POUNDS PER CUBIC FOOT
PC	PRECAST
ℙ	PLATE (STEEL)
PP	PARTIAL PENETRATION
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
REF	REFERENCE
REINF	REINFORCEMENT
REQ'D	REQUIRED
RO	ROUGH OPENING
RHB	ROWS OF HORIZ BRIDGING
SC	SLIP CRITICAL
SCHED	SCHEDULE
SDI	STEEL DECK INSTITUTE
SHT	SHEET
SEP	SEPARATION
SIM	SIMILAR
SJ	STEEL JOIST
SLV	SLEEVE
SOG	SLAB ON GRADE
SPCS	SPACE
SPEC	SPECIFICATION
SQ	SQUARE
STD	STANDARD
STIFF	STIFFENER
STIR	STIRRUP
STL	STEEL
T&B	TOP AND BOTTOM
T/	TOP OF
T/P	TOP OF PARAPET
T/S	TOP OF SLAB
T/W	TOP OF WALL
THD	THREAD
THK	THICK(EN)
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UNO	UNLESS NOTED OTHERWISE
V OR VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WHS	WELDED HEADED STUD
WS	WATER STOP
WP	WORK POINT
WT	WEIGHT

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

ABBREVIATIONS AND LEGENDS

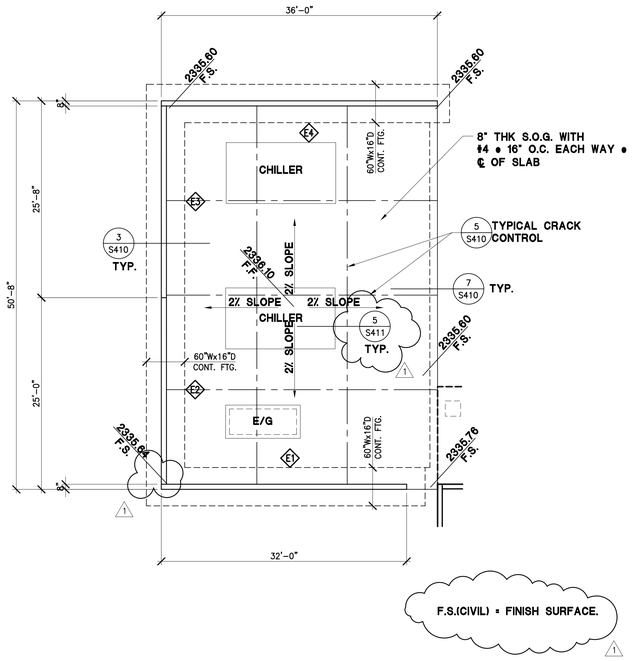
AM-02

Designed By:
Drawn By:
Checked By:

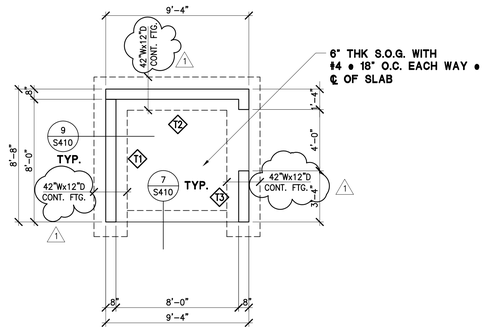
Drawing No.
S101

USER NAME: ALee
PLOT DATE: 09/01/2004 - 3:14PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S101.dwg

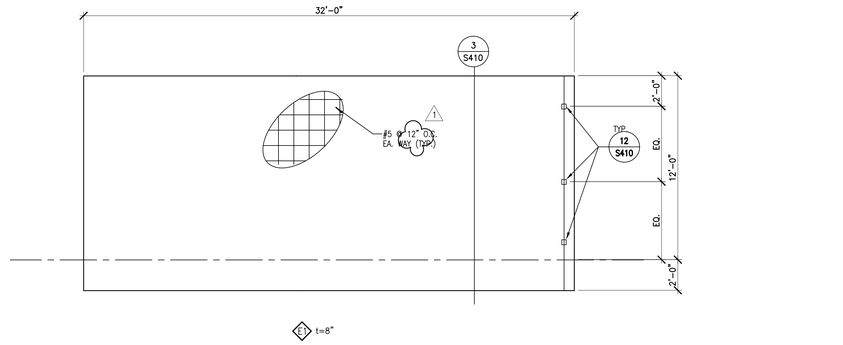
P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S101.dwg, 9/1/2004 3:14:05 PM, Acrobat Distiller.pc3

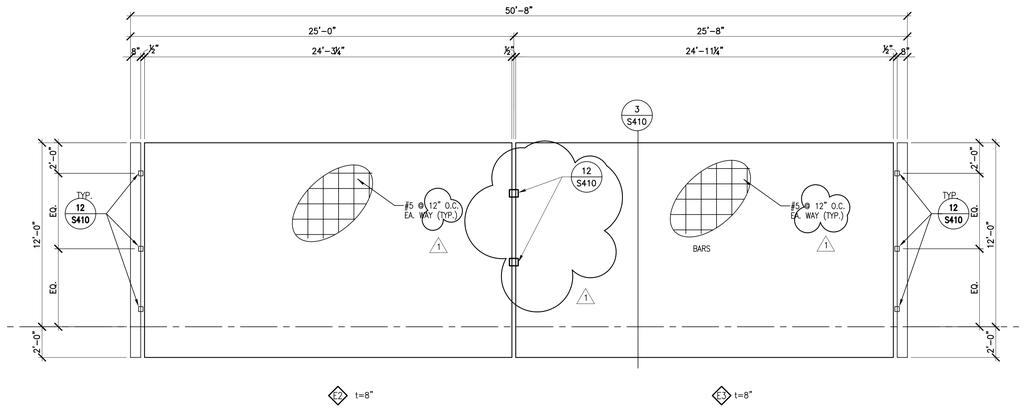


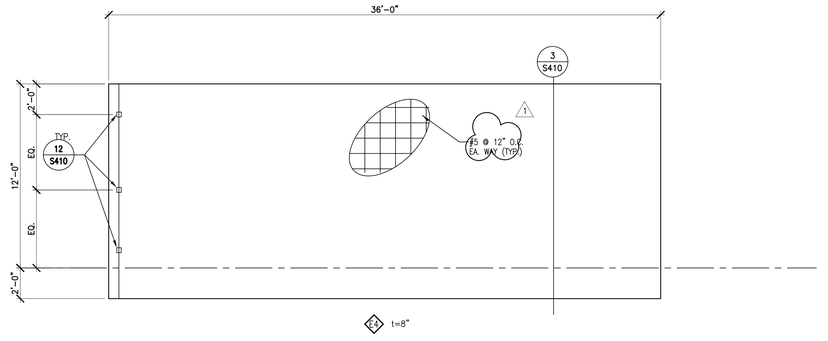
1 ENLARGED EQUIPMENT ENCLOSURE PLAN
SCALE: 1/8"=1'-0"



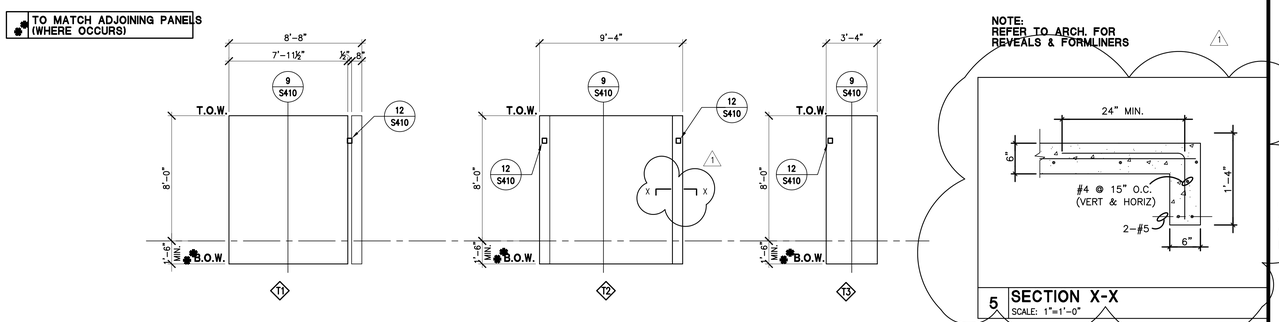
2 ENLARGED TRASH ENCLOSURE PLAN
SCALE: 1/8"=1'-0"







3 WALL PANEL ELEVATIONS @ EQUIPMENT ENCLOSURE
SCALE: 1/4"=1'-0"



4 WALL PANEL ELEVATION @ TRASH ENCLOSURE
SCALE: 1/4"=1'-0"

5 SECTION X-X
SCALE: 1"=1'-0"

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

ENLARGED SITE FOUNDATION PLANS AND PANEL ELEVATIONS
AM-02

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

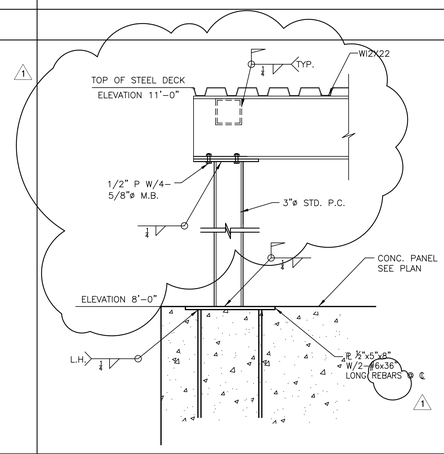
DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

Designed By: FL
Drawn By: RR
Checked By: RM

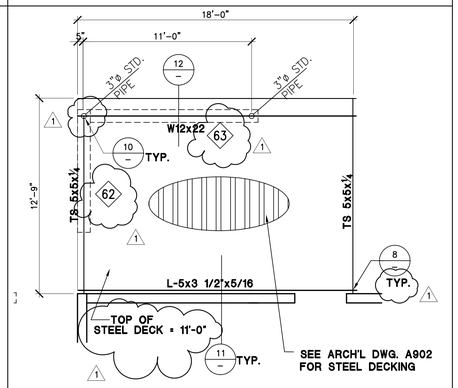
Drawing No.
S110

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:06PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S110.dwg

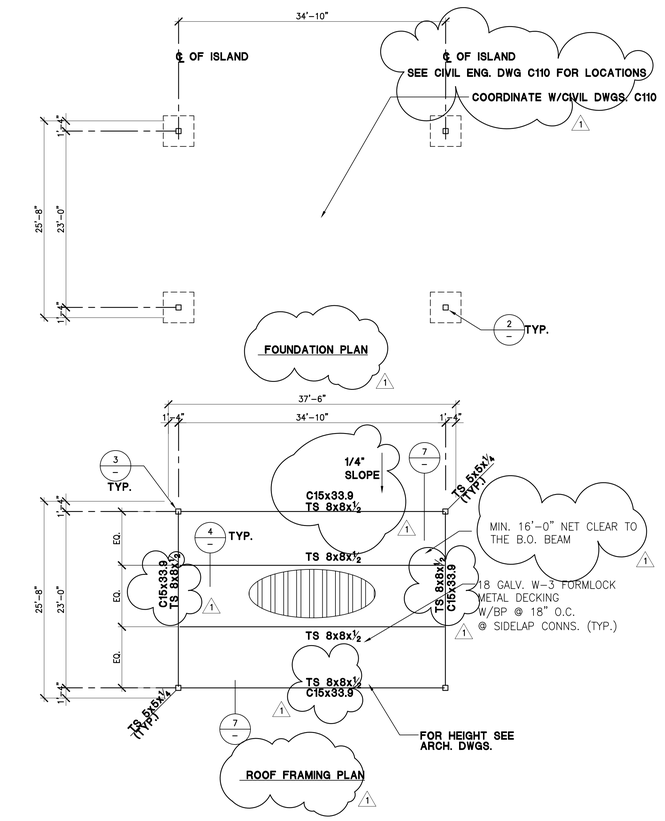
P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S110.dwg, 9/1/2004 2:06:40 PM, Acrobat Distiller.pc3



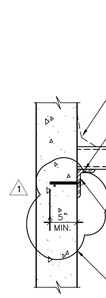
10 CANOPY SUPPORT DETAIL
SCALE: NONE



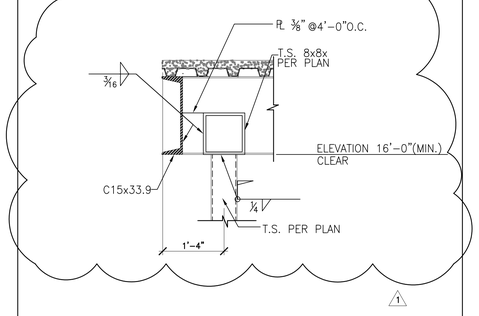
6 CANOPY FRAMING PLAN ● CANWASH AREA
SCALE: 1/4"=1'-0"



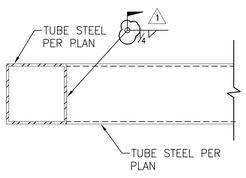
1 CANOPY FOUNDATION AND FRAMING PLAN ● CAR WASH
SCALE: 1/8"=1'-0"



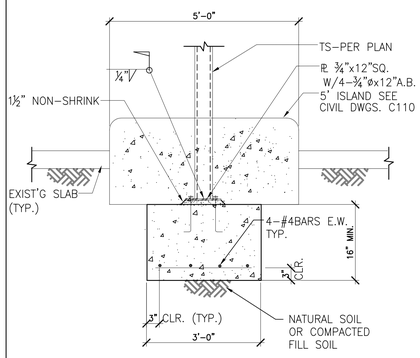
11 CANOPY SUPPORT DETAIL
SCALE: NONE



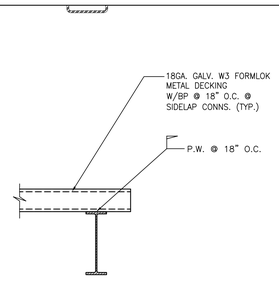
7 CHANNEL ● COLUMN
SCALE: NONE



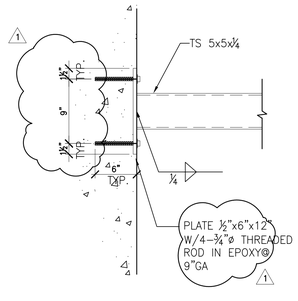
3 TUBE STEEL TO TUBE STEEL
SCALE: NONE



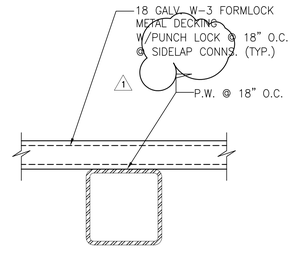
2 FOOTING TO COLUMN DETAIL
SCALE: NONE



12 CANOPY SUPPORT DETAIL
SCALE: NONE



8 CHANNEL CONNECTION
SCALE:



4 CANOPY SUPPORT DETAIL
SCALE: NONE

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

CANOPIES FRAMING PLANS AND DETAILS

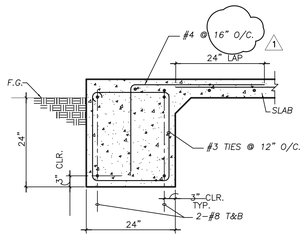
AM-02

Designed By:
Drawn By: RR
Checked By: RM

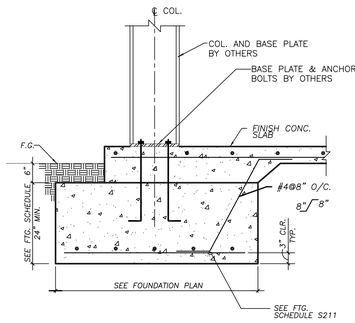
Drawing No.
S111

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:05PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S111.dwg

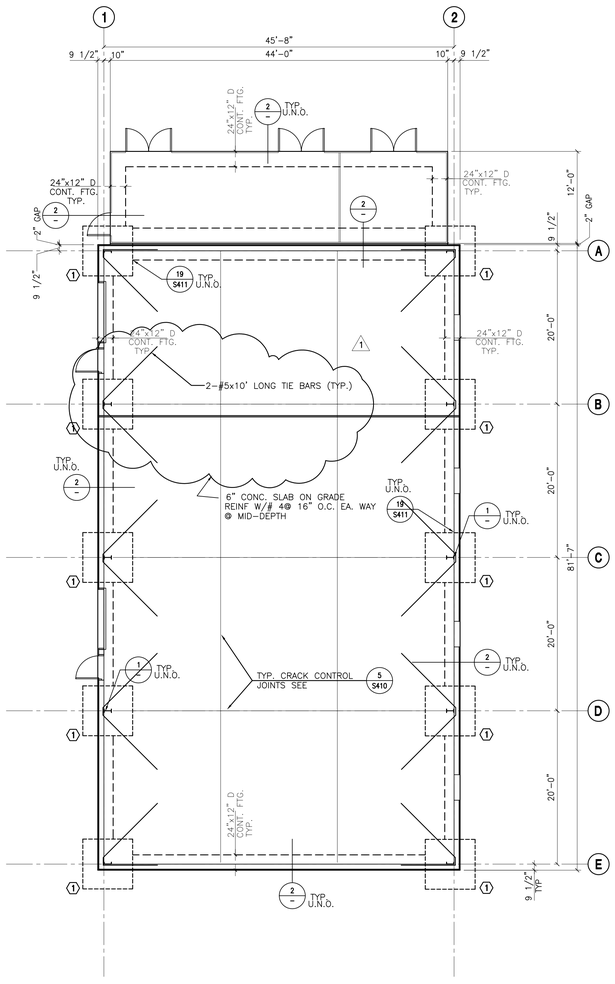
P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S111.dwg, 9/1/2004 2:05:44 PM, Acrobat Distiller.pc3



2 Detail: **FOOTING @ STORAGE BUILDING**
CAD File: XMDT030 Scale: FULL SCALE 0 1" 2"



1 Detail: **FOOTING @ STORAGE BUILDING**
CAD File: XMDT030 Scale: FULL SCALE 0 1" 2"



N

A **STORAGE BUILDING FOUNDATION PLAN**
SCALE: 1/8"=1'-0"

FOUNDATION NOTES:

1. METAL BUILDING REGISTERED (CIVIL OR STRUCTURAL) ENGINEER TO VERIFY THE DESIGN OF THE FOUNDATION (BY KLT) FOR THE STORAGE BUILDING.
2. VERIFY ALL FLOOR RECESS SLAB DEPRESSION WITH ARCHITECTURAL PLANS.
3. VERIFY ALL DIMENSIONS SHOWN WITH ARCHITECTURAL DRAWINGS. REPORT ANY DISCREPANCY ON DIMENSIONS TO THE PROJECT ENGINEER OR ARCHITECT IN CHARGE BEFORE THE START OF CONSTRUCTION.
4. SEE ARCHITECTURAL DRAWINGS FOR FINISHED SLAB ELEVATIONS.
5. SEE CIVIL DRAWINGS FOR ALL EXTERIOR PAVEMENT AND CONCRETE SLAB.
6. (-) INDICATES FOOTING PAD NUMBER. SEE SCHEDULE.
7. CRACK CONTROL JOINTS SHALL NOT EXCEED 15'-0" O.C.

COLUMN AND FOOTING SCHEDULE					
TYPE	COL. SIZE	BASE PLATE	PAD SIZE	PAD THK.	PAD REBAR
1	BY OTHER		6'-0"X6'-0"	24"	6-#6 E.W.

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

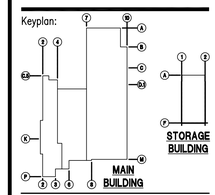
Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:



Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

STORAGE BUILDING FOUNDATION PLAN

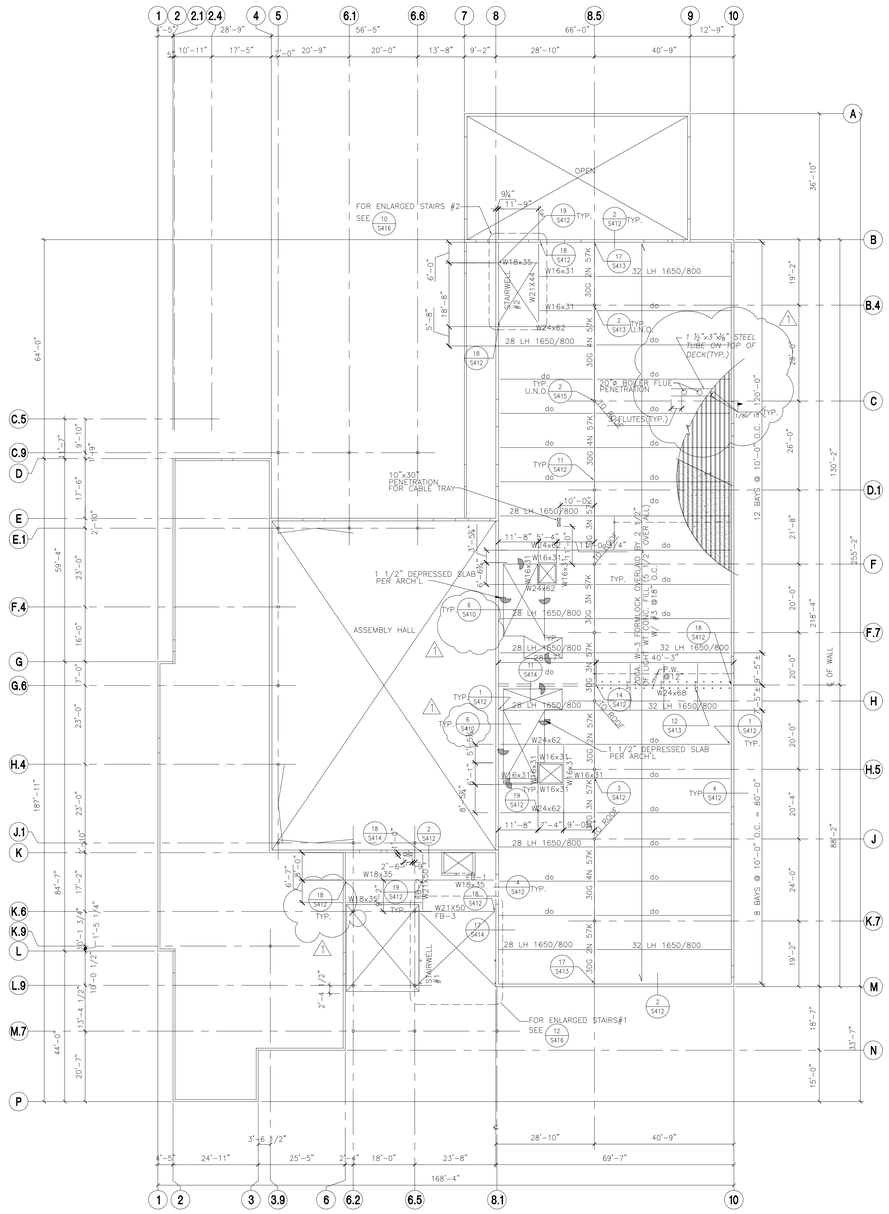
AM-02

Designed By:
Drawn By:
Checked By:

Drawing No. **S211**

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:05PM
FILENAME: P:\F1W15401\700CADD\709STRI\Files Received\KLT\083004\1541S211.dwg

P:\F1W15401\700CADD\709STRIFiles Received\KLT\083004\1541S211.dwg, 9/1/2004 2:04:54 PM, Acrobat Distiller.pc3



1 OVERALL SECOND FLOOR FRAMING PLAN
SCALE: 1/16"=1'-0"

SECOND FLOOR FRAMING NOTES

1. FINISHED FLOOR ELEVATION = 15'-6"
2. DESIGN FLOOR LOADS:
   DEAD LOAD: 65 PSF
   LIVE LOAD: 80 PSF
   PARTITION LOAD: 20 PSF
3. TRUSS MANUFACTURER SHALL SUBMIT OPEN WEB TRUSS JOIST AND GIRDER CALCULATIONS AND KEY PLANS TO PROJECT ENGINEER FOR REVIEW AND TO THE CITY FOR APPROVAL PRIOR TO FABRICATION. REFER TO SPRINKLER CONTRACTOR DRAWINGS FOR ALL SPRINKLER PIPE LOCATIONS, WEIGHT AND ALL ASSOCIATED SEISMIC BRACE LOADS. REFER TO MECHANICAL DRAWINGS FOR LOCATION AND WEIGHT OF ALL FLOOR TOP EQUIPMENTS.
4. ALL TRUSSES, PURLINS AND GIRDERS SHALL BE BRIDGED AND/OR BRACED ACCORDING TO MANUFACTURERS RECOMMENDATION.
5. TRUSS SEAT HEIGHT SHALL BE AS FOLLOWS (U.N.O.):
   AT PURLIN = 5"
   AT GIRDERS = 7 1/2"
6. DEFLECTION CRITERIA FOR TRUSS:
   $\triangle_{LL}$ = L/360
   $\triangle_{TL}$ = L/240

A. STEEL DECK SHALL BE WELDED TO SUPPORT BEAMS WITH EFFECTIVE 1/2" CENTERLINE ARC SPOT (PUDDLE) WELDS OR 3/8" X 1" LONG WELDS SPACED NOT MORE THAN 12" ON CENTER (UNLESS NOTED ON PLANS) ACROSS THE WIDTH OF THE UNIT.

B. CONTRACTOR TO VERIFY DECK SHORING REQUIREMENTS WITH STEEL DECK MANUFACTURER.

7. FLOOR DECK:
   USE "VERCO" OR APPROVED EQUAL 20 GA. (GALV.) W3 FORMLOCK METAL DECKING OR EQUAL WITH 4 WELDS PER SHEET TO SUPPORT & PUNCHLOCK AT 24" O.C. AT SIDELAPS OVERLAID BY 2 1/2" OF LIGHT WT. (5 1/2" TOTAL DEPTH) (Wc=115pcf) CONCRETE FILL W/ F'c=3000 psi @ 28 DAYS REINFORCED WITH #3 @ 18" O.C. EACH WAY

ASSEMBLY HALL

1. FOR DUCT SUPPORT SEE DET.15/S413; FOR LOCATION SEE ARCH'L DWG. A.522

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

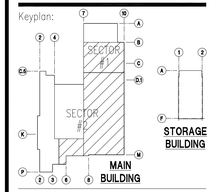
KL
CONSULTING • STRUCTURAL • ENGINEERS
3430 Irvine Avenue•Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

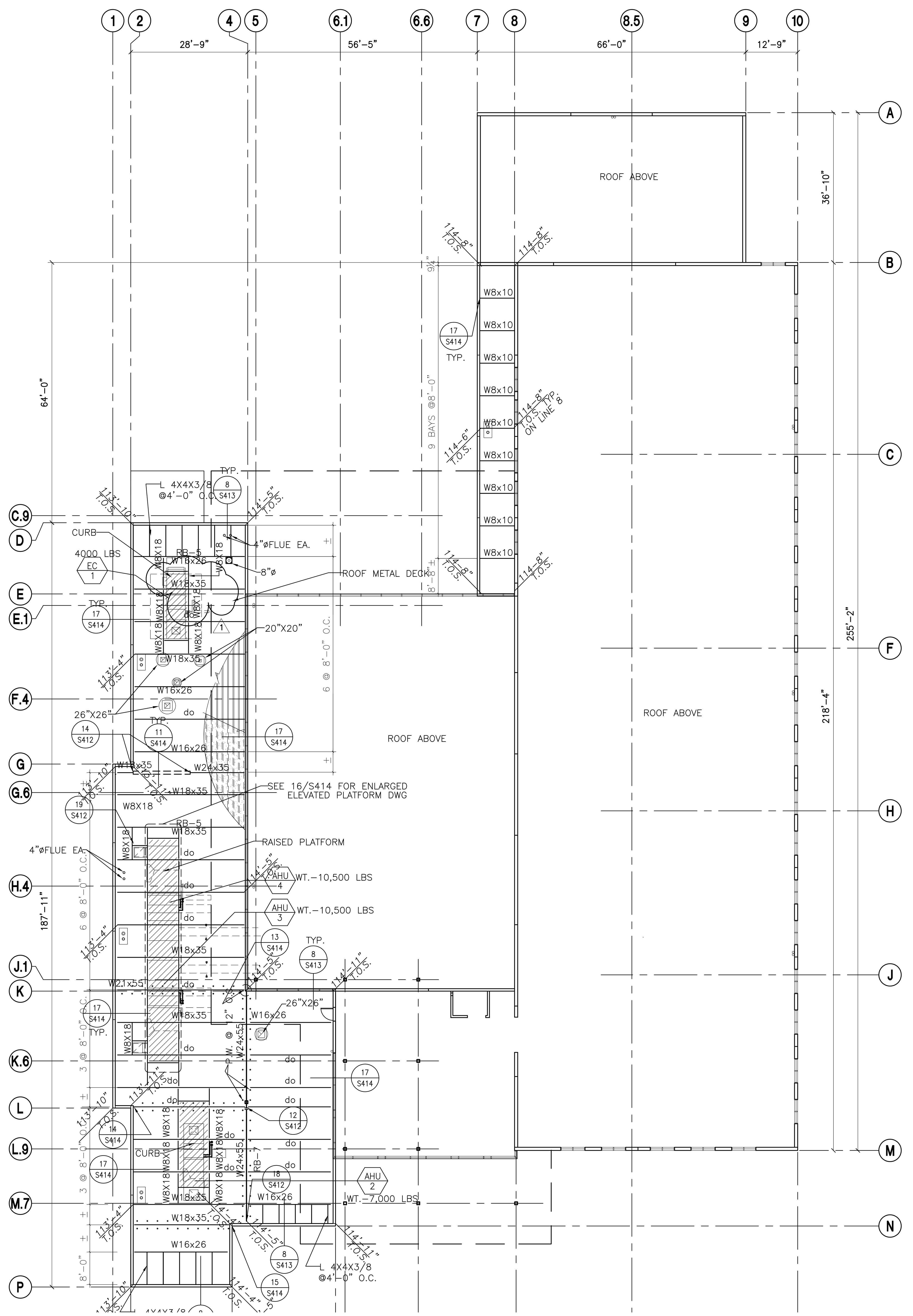
Keyplan:


Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

OVERALL
SECOND FLOOR
FRAMING PLAN
AM-02

Designed By: W.M
Drawn By:
Checked By:
Drawing No.
S220



1 **OVERALL LOW ROOF FRAMING PLAN**
SCALE: 1/16"=1'-0"

METAL DECK NOTES:

A. USE "VERCO" OR APPROVED EQUAL 20 GA. (GALV.) HSB-36 (SEE PLAN) FORMLOCK METAL DECKING OR EQUAL WITH 4 WELDS PER SHEET TO SUPPORT & TSW AT 12" O.C. AT SIDELAPS

B. STEEL DECK SHALL BE WELDED TO SUPPORT BEAMS WITH EFFECTIVE 1/2" CENTERLINE ARC SPOT (PUDDLE) WELDS OR 3/8" X 1" LONG WELDS SPACED NOT MORE THAN 6" ON CENTER (UNLESS NOTED ON PLANS) ACROSS THE WIDTH OF THE UNIT.

C. CONTRACTOR TO VERIFY DECK SHORING REQUIREMENTS WITH STEEL DECK MANUFACTURER.

1

ROOF FRAMING NOTES:

1. DESIGN ROOF LOADS (U.N.O.)
   A. PURLINS @ 8'-0' O.C.
      DEAD LOAD = 16 PSF
      LIVE LOAD = 20 PSF (SNOW LOAD, NON-REDUCIBLE)
      UPLIFT LOAD = 20 PSF
   B. GIRDERS:
      DEAD LOAD = 16 PSF
      LIVE LOAD = 20 PSF (SNOW LOAD, NON-REDUCIBLE)
      UPLIFT LOAD = 12 PSF (GROSS)
   C. ALL TRUSS AND GIRDERS SHALL HAVE SJI STANDARD CAMBERS.
      1
2. TRUSS MANUFACTURER SHALL SUBMIT OPEN WEB TRUSS PURLIN AND GIRDER CALCULATIONS AND KEY PLANS TO PROJECT ENGINEER FOR REVIEW AND TO THE CITY FOR APPROVAL PRIOR TO FABRICATION. REFER TO SPRINKLER CONTRACTOR DRAWINGS FOR ALL SPRINKLER PIPE LOCATIONS, WEIGHT AND ALL ASSOCIATED SEISMIC BRACE LOADS. UPGRADE ALL ROOF TRUSSES AND GIRDERS FOR ALL MECHANICAL AND SPRINKLER LOADS AS SHOWN ON MECHANICAL AND SPRINKLER DRAWINGS.
3. ALL TRUSSES, PURLINS AND GIRDERS SHALL BE BRIDGED AND/OR BRACED ACCORDING TO MANUFACTURERS RECOMMENDATION.
4. TRUSS SEAT HEIGHT SHALL BE AS FOLLOWS (U.N.O.):
   AT PURLIN = 5"
   AT GIRDERS = 7 1/2"
5. ALL ROOF TRUSS PURLINS AND GIRDERS SHALL HAVE SEAT SLOPE ACCORDING TO ROOF ELEVATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF ELEVATIONS.
6. DEFLECTION CRITERIA:
   LIVE LOAD DEFLECTION ≤ L/240
   TOTAL LOAD DEFLECTION ≤ L/180
7. INDICATES BOTTOM OF SHEATHING ELEVATION. GENERAL CONTRACTOR SHALL VERIFY ALL ROOF ELEVATIONS WITH ARCH'L. DWGS. AND NOTIFY THE ARCHITECT AND OR ENGINEER IF ANY DICREPANCIES ARISES PRIOR TO CONSTRUCTION.
8. REFER TO ARCHITECTURAL DRAWINGS FOR SKYLIGHT LOCATIONS.
   1
9. CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF PENETRATIONS WITH APPROVED ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO CONSTRUCTION. CONTACT STRUCTURAL ENGINEER OF ANY DISCREPANCIES.

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING ▫ STRUCTURAL ▫ ENGINEERS
3430 Irvine Avenue▫Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

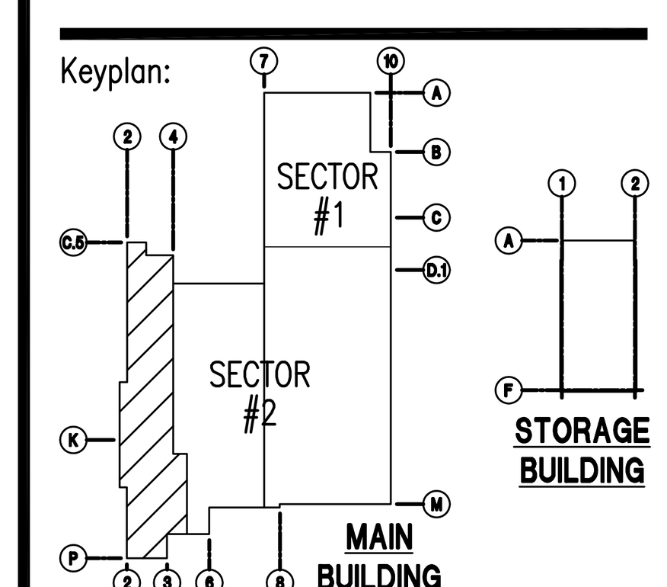
Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:



Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.:	F1W15401
ARNG Project No.:	060297

Drawing Title:

OVERALL LOW ROOF FRAMING PLAN
AM-02

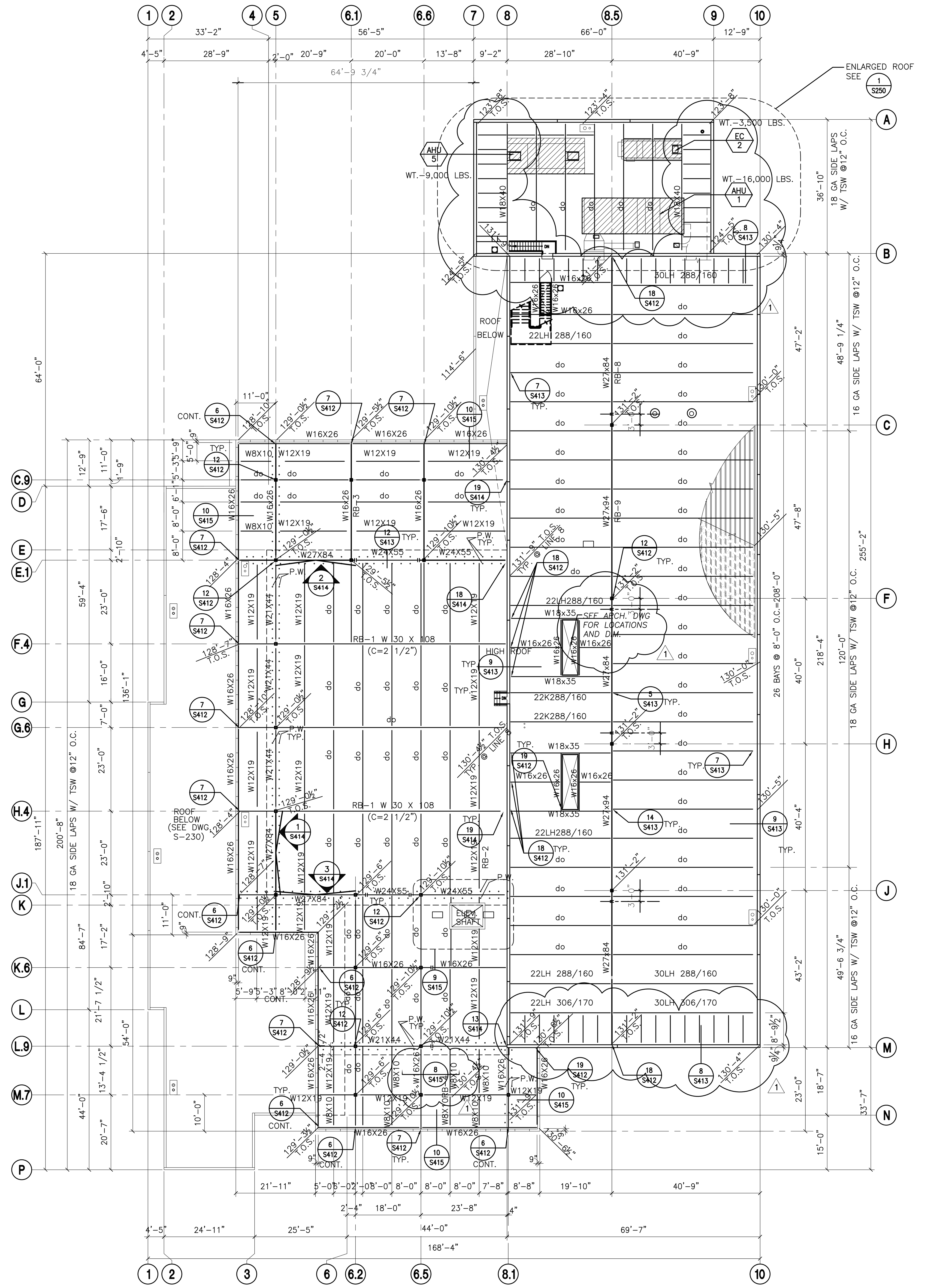
Designed By: W.M
Drawn By:
Checked By:

Drawing No. **S230**

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:03PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S230.dwg



METAL DECK NOTES:

A. USE "VERCO" 16 GA OR 18 GA. (GALV.) HSB36 (SEE PLAN) METAL DECKING OR EQUAL WITH 5 WELDS PER SHEET TO SUPPORT & SSW@12" O.C. @ SIDE LAPS. (1)

B. USE ACOUSTIC METAL DECKING (GALV.) @ ASSEMBLY AREA. USE STANDARD METAL DECKING FOR ALL OTHER AREAS.

C. STEEL DECK SHALL BE WELDED TO SUPPORT BEAMS WITH EFFECTIVE 1/2" CENTERLINE ARC SPOT (PUDDLE) WELDS OR 3/8" X 1" LONG WELDS SPACED NOT MORE THAN 6" ON CENTER (UNLESS NOTED ON PLANS) ACROSS THE WIDTH OF THE UNIT.

D. CONTRACTOR TO VERIFY DECK SHORING REQUIREMENTS WITH STEEL DECK MANUFACTURER. (1)

ROOF FRAMING NOTES:

1. DESIGN ROOF LOADS (U.N.O.)
   - A. PURLINS @ 8'-0' O.C.
     DEAD LOAD = 16 PSF
     LIVE LOAD = 20 PSF (SNOW LOAD, NON-REDUCIBLE)
     UPLIFT LOAD = 20 PSF
   - B. GIRDERS:
     DEAD LOAD = 16 PSF
     LIVE LOAD = 20 PSF (SNOW LOAD, NON-REDUCIBLE)
     UPLIFT LOAD = 12 PSF (GROSS)
   - C. ALL TRUSS AND GIRDERS SHALL HAVE SJI STANDARD CAMBERS.
   - D. REFER TO 13/S413 FOR ALL AXIAL AND ADD LOADS FOR TRUSS PURLIN DESIGNS. (1)
2. TRUSS MANUFACTURER SHALL SUBMIT OPEN WEB TRUSS PURLIN AND GIRDER CALCULATIONS AND KEY PLANS TO PROJECT ENGINEER FOR REVIEW AND TO THE CITY FOR APPROVAL PRIOR TO FABRICATION. REFER TO SPRINKLER CONTRACTOR DRAWINGS FOR ALL SPRINKLER PIPE LOCATIONS, WEIGHT AND ALL ASSOCIATED SEISMIC BRACE LOADS. UPGRADE ALL ROOF TRUSSES AND GIRDERS FOR ALL MECHANICAL AND SPRINKLER LOADS AS SHOWN ON MECHANICAL AND SPRINKLER DRAWINGS.
3. ALL TRUSSES, PURLINS AND GIRDERS SHALL BE BRIDGED AND/OR BRACED ACCORDING TO MANUFACTURERS RECOMMENDATION.
4. TRUSS SEAT HEIGHT SHALL BE AS FOLLOWS (U.N.O.):
   AT PURLIN = 5"
   AT GIRDERS = 7 1/2"
5. ALL ROOF TRUSS PURLINS AND GIRDERS SHALL HAVE SEAT SLOPE ACCORDING TO ROOF ELEVATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF ELEVATIONS.
6. DEFLECTION CRITERIA:
   LIVE LOAD DEFLECTION ≤ L/240
   TOTAL LOAD DEFLECTION ≤ L/180 (1)
7. INDICATES BOTTOM OF DECK ELEVATION. GENERAL CONTRACTOR SHALL VERIFY ALL ROOF ELEVATIONS WITH ARCH'L. DWGS. AND NOTIFY THE ARCHITECT AND OR ENGINEER IF ANY DICREPANCIES ARISES PRIOR TO CONSTRUCTION.
8. REFER TO ARCHITECTURAL DRAWINGS FOR SKYLIGHT LOCATIONS. (1)
9. CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF PENETRATIONS WITH APPROVED ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO CONSTRUCTION. CONTACT STRUCTURAL ENGINEER OF ANY DISCREPANCIES.
10. T.O.S. = TOP OF STEEL LEDGER.

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING ▫ STRUCTURAL ▫ ENGINEERS
3430 Irvine Avenue▫Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

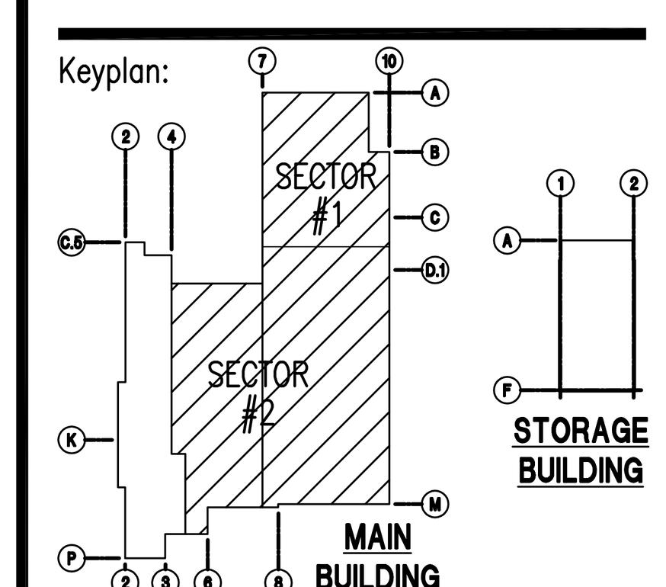
Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:



Scale: 0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.:	F1W15401
ARNG Project No.:	060297

Drawing Title:

OVERALL HIGH ROOF FRAMING PLAN
AM-02

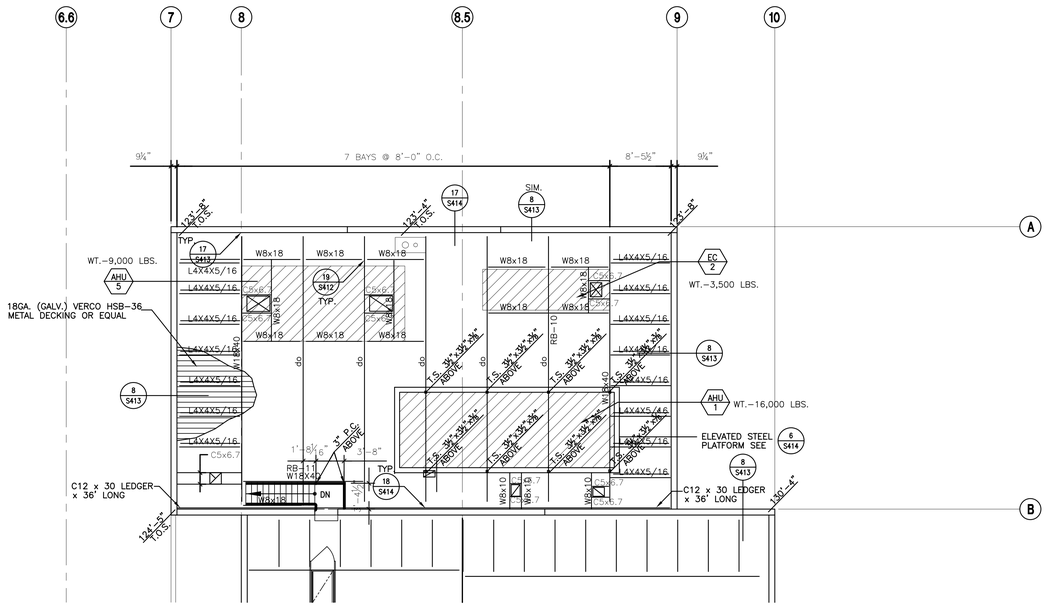
Designed By: W.M
Drawn By:
Checked By:
Drawing No. S240

MODIFIED FOR SITE ADAPTATION AT LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

1 **OVERALL HIGH ROOF FRAMING PLAN**
SCALE: 1/16"=1'-0"

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:03PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S240.dwg



1 **ENLARGED PARTIAL HIGH ROOF FRAMING PLAN**
SCALE: 1/8"=1'-0"

N

MECHANICAL EQUIPMENT CONCRETE PLATFORM:

A. STEEL DECK SHALL BE WELDED TO SUPPORT BEAMS WITH EFFECTIVE 1/2" CENTERLINE ARC SPOT (PUDDLE) WELDS OR 3/8" X 1" LONG WELDS SPACED NOT MORE THAN 6" ON CENTER (UNLESS NOTED ON PLANS) ACROSS THE WIDTH OF THE UNIT.

B. CONTRACTOR TO VERIFY DECK SHORING REQUIREMENTS WITH STEEL DECK MANUFACTURER.

1

ROOF FRAMING NOTES:

1. DESIGN ROOF LOADS (U.N.O.)

   A. PURLINS @ 8'-0" O.C.
   DEAD LOAD = 16 PSF
   LIVE LOAD = 20 PSF
   UPLIFT LOAD = 20 PSF

2. DEFLECTION CRITERIA:

   LIVE LOAD DEFLECTION ≤ L/240
   TOTAL LOAD DEFLECTION ≤ L/180

3. INDICATES BOTTOM OF SHEATHING ELEVATION. GENERAL CONTRACTOR SHALL VERIFY ALL ROOF ELEVATIONS WITH ARCH'L. DWGS. AND NOTIFY THE ARCHITECT AND OR ENGINEER IF ANY DICREPANCIES ARISES PRIOR TO CONSTRUCTION.

4. REFER TO ARCHITECTURAL DRAWINGS FOR SKYLIGHT LOCATIONS.

1

5. CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF PENETRATIONS WITH APPROVED ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO CONSTRUCTION. CONTACT STRUCTURAL ENGINEER OF ANY DISCREPANCIES.

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

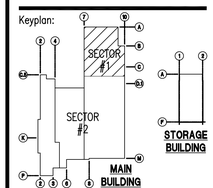
Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:



Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

ENLARGED PARTIAL HIGH ROOF FRAMING PLAN

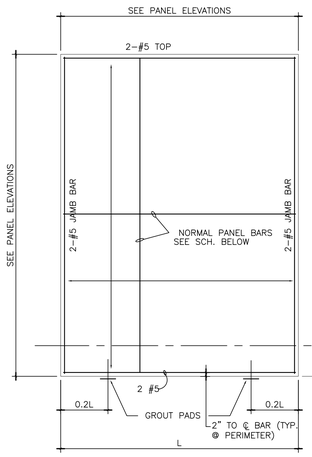
AM-02

Designed By:
Drawn By: RR
Checked By:

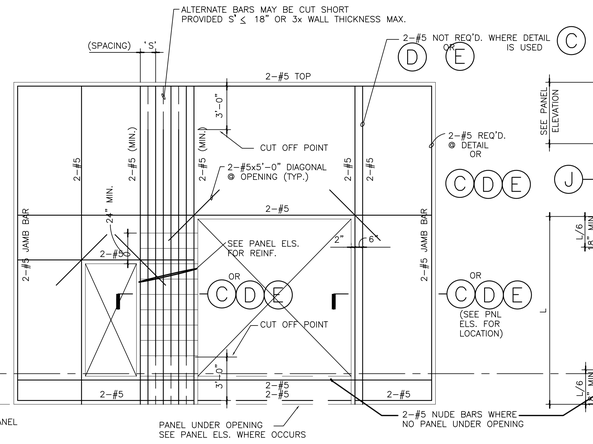
Drawing No.
S250

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:02PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S250.dwg

P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S250.dwg, 9/1/2004 2:01:59 PM, Acrobat Distiller.pc3

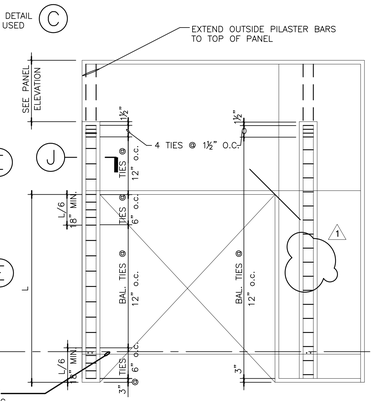


SOLID PANELS



SEE SOLID PANEL FOR TYP. REINF.

PANELS W/ OPENINGS



SEE OTHER PANELS FOR ADDITIONAL REINF.

PANELS W/ PILASTERS AT OPENING

TYPICAL PANEL NOTES:

1. ALL PANELS ARE VIEWED FROM INSIDE UNLESS NOTED OTHERWISE (U.N.O.)
2. ALL PANELS ARE CAST WITH OUTSIDE FACE DOWN.
3. CONCRETE CONTRACTOR SHALL VERIFY ALL CUTOUTS, SLEEVES, ETC. W/ PLUMBING, HEATING & ELECTRICAL CONTRACTORS.
4. (U.N.O.) ALL PANELS SHALL HAVE A 3/4" CHAMFER ON ALL EDGES EXCEPT BOTTOM
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PANEL DIMENSIONS AS WELL AS THE LOCATION OF ALL EMBEDDED ITEMS, WITH ROOF AND FLOOR FRAMING PLANS PRIOR TO CASTING OF CONCRETE.
6. PANEL STRESSES ARE TO BE CHECKED BY THE ERECTION CONTRACTOR WHO SHALL PROVIDE REINFORCING STEEL AS REQUIRED FOR HANDLING AND ERECTION. USE OF STRONGBACKS SHALL BE UTILIZED AT ALL EXCESSIVE OPENINGS.
7. N.S. = NEAR SIDE
   F.S. = FAR SIDE
   E.S. = EACH SIDE
   'S' = SPACING
   L = CLEAR HEIGHT
   T = GROSS PANEL THICKNESS
8. REFER TO ARCHITECTURAL DRAWINGS FOR PAINT RELIEF.
9. THE GENERAL CONTRACTOR SHALL VERIFY ALL ROOF LEDGER ELEVATIONS WITH ARCHITECTURAL ROOF ELEVATIONS PLANS PRIOR TO CASTING OF CONCRETE PANELS. CONTRACTOR SHALL NOTIFY PROJECT ARCHITECT AND ENGINEER IF ANY DISCREPENCIES ARE DISCOVER.
10. GENERAL CONTRACTOR SHALL VERIFY ALL ROOF LEDGER ELEVATIONS AGAINST ARCHITECTURAL ROOF PLANS PRIOR TO SETTING ANY LEDGERS.
11. CONCRETE PANEL CONTRACTOR TO PLACE TYPICAL JAMB BARS (SEE DETAL (A)) AROUND ALL FUTURE KNOCK-OUTS.
12. GENERAL CONTRACTOR SHALL VERIFY ALL BOTTOM PANEL DEPTHS WITH APPROVED CIVIL DRAWINGS TO ENSURE THAT PANEL DEPTHS MEET MINIMUM DEPTH REQUIREMENTS PER DETAILS ON SHEET SD-2. NOTIFY PROJECT ARCHITECT AND ENGINEER IMMEDIATELY IF ANY PANELS DO NOT MEET THE MINIMUM DEPTH REQUIREMENTS.
13. MINIMUM CONCRETE COVER:
    #8 BARS AND UNDER INCLUDING TIES – 1" COVER
    #9 BARS AND ABOVE – 2" COVER
14. THE DESIGN MUST BE APPROVED BY THE C.O.R. PRIOR TO THE MANUFACTURER OF THE PANEL AND SHALL BE DESIGN IN ACCORDANCE WITH ACI 318-02 CHAPTER 16 (OR LATEST EDITION).

1

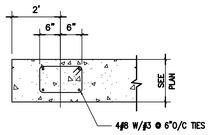
TYPICAL PANEL REINFORCEMENT (U.N.O.) (A)

REBAR LOCATION (B)

HORIZ. TIES OR HORIZ REBAR SCH.		
t"	HORIZ. TIES (D)	HORIZ. STL (C)(E)
7¼"	#3 @ 6"	# 3 @ 6"
9¼"	#3 @ 6"	# 4 @ 6"

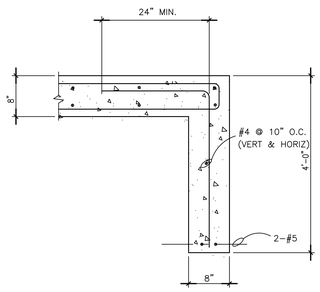
FOR DETAIL (D) EXTEND TIES 42" MIN. BEYOND OPENING (U.N.O.)

(F)

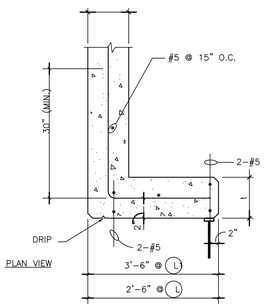


(J)

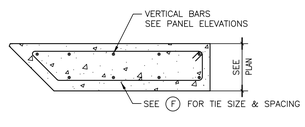
PANEL THICKNESS (t) & REINF. (U.N.O.)				
WALL PANELS	't'	VERT. STL.	HORIZ. STL.	F'c
SOLID PANEL (1), (16), (20)	9 1/4"	#5@10"O.C.	#5@12"O.C.	4000 PSI
(2) TO (15), (17) TO (19), (21)	9 1/4"	#5@12"O.C.	#5@12"O.C.	4000 PSI
(42) TO (46)	9 1/4"	#5@10"O.C.	#5@12"O.C.	3000 PSI
(V1), (V3), (V4), (V5)	8"	#5@12"O.C.	#5@12"O.C.	3000 PSI
(V2)	9 1/4"	#5@10"O.C.	#5@10"O.C.	4000 PSI
SOLID PANEL (27), (29), (34)	7 1/4"	#5@12"O.C.	#5@12"O.C.	3000 PSI
(51), (55), (56), (58) TO (66)				
(28), (30) TO (33), (35) TO (41),	7 1/4"	#5@12"O.C.	#5@12"O.C.	3000 PSI
(47) TO (50), (52) TO (54), (57)				
SHEAR WALL (S1)	7 1/4"	#5@12"O.C.	#5@12"O.C.	3000 PSI



(R)



(S)



(G)

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

TYPICAL WALL PANEL DETAILS

AM-02

Designed By:
Drawn By: RR
Checked By:

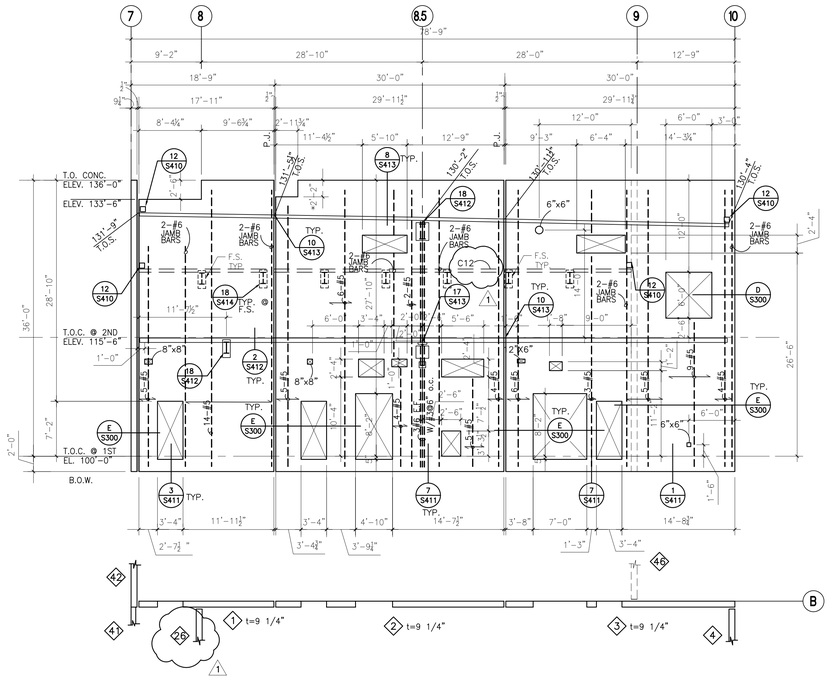
Drawing No.
S300

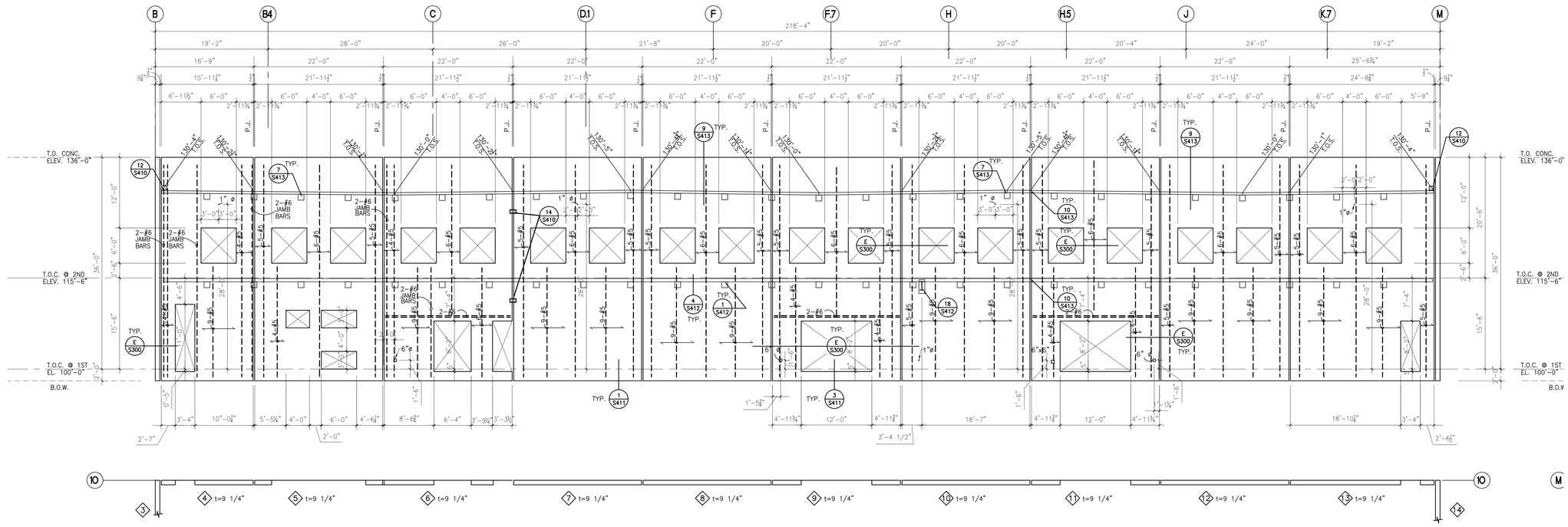
MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: Alex
PLOT DATE: 09/01/2004 - 2:01PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S300.dwg

P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S300.dwg, 9/1/2004 2:01:08 PM, Acrobat Distiller.pc3





LEGEND

FOW ----- FACE OF WALL
TOC ----- INDICATES TOP OF CONCRETE
F.F. ----- INDICATES FIRST FLOOR LINE
BOW ----- INDICATES BOTTOM OF WALL
BOS ----- INDICATES BOTTOM OF STEEL DECK
TOP ----- INDICATES TOP OF PILASTER
F.S. ----- INDICATES FAR SIDE OF WALL
T.O.S. -----INDICATES TOP OF STEEL LEDGER

NOTES

1. REFER TO ARCHITECTURAL FOR SCUPPER OPENINGS & EXTERIOR REVEALS.
2. SEE SHEET S300 FOR BALANCE OF REBARS NOT SHOWN IN THIS SHEET.

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale: 0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

WALL PANEL ELEVATION

AM-02

Designed By:
Drawn By: RR
Checked By:

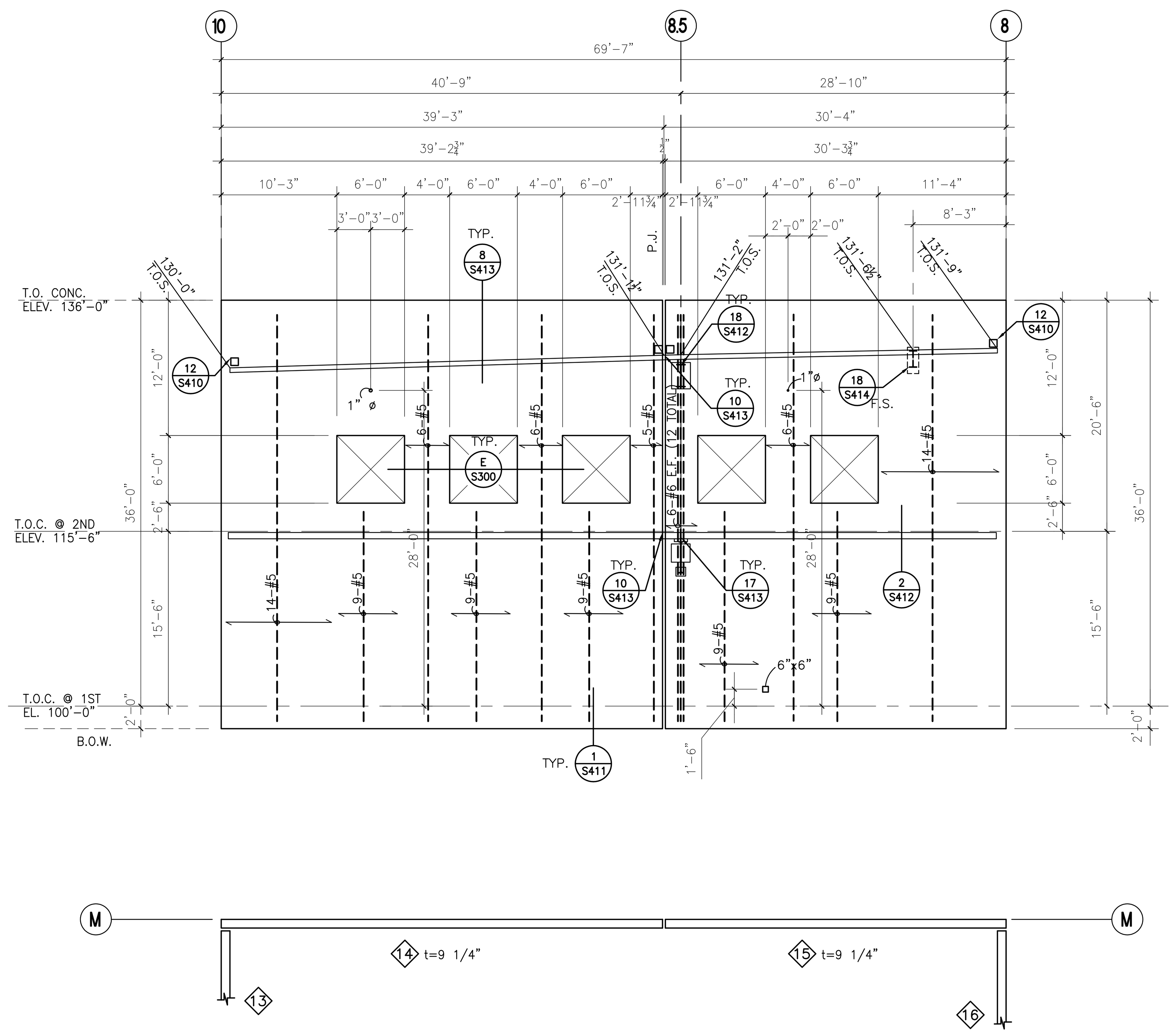
Drawing No. **S301**

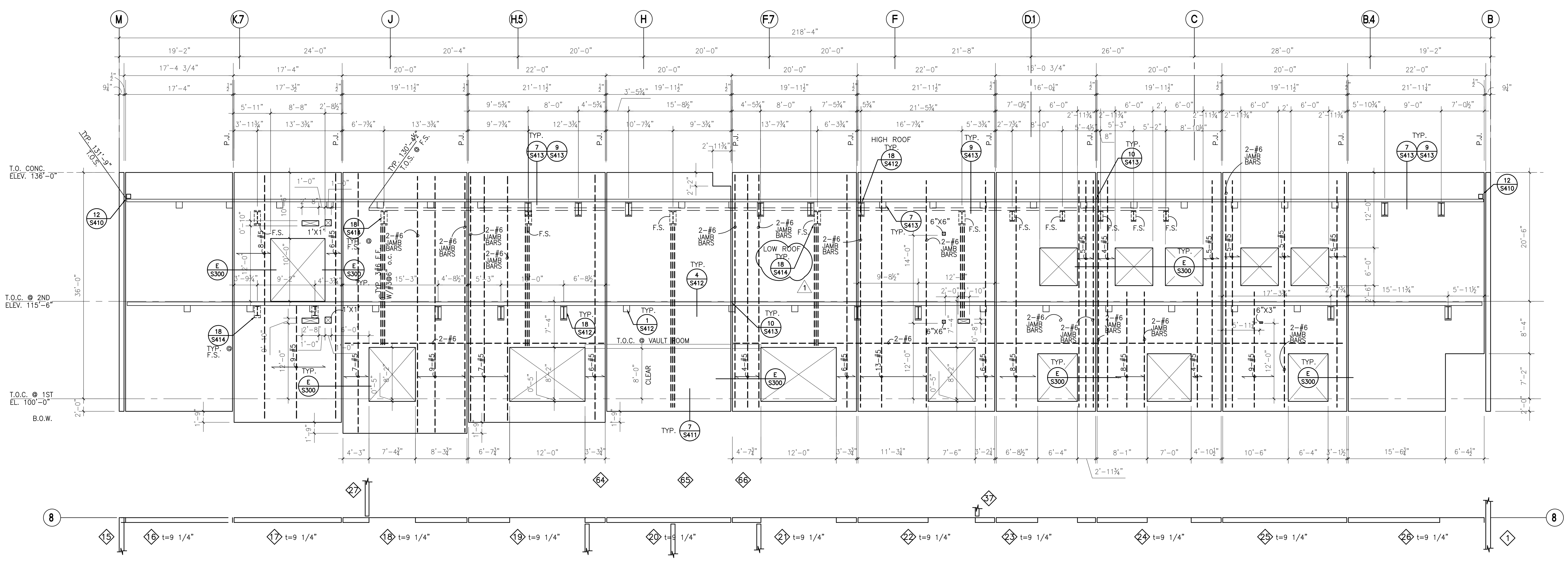
MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: ALee
PLOT DATE: 09/01/2004 - 2:00PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S301.dwg

P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S301.dwg, 9/1/2004 2:00:18 PM, Acrobat Distiller.pc3





LEGEND

FOW ----- FACE OF WALL

TOC ----- INDICATES TOP OF CONCRETE

F.F. ----- INDICATES FIRST FLOOR LINE

BOW ----- INDICATES BOTTOM OF WALL

BOS ----- INDICATES BOTTOM OF STEEL DECK

TOP ----- INDICATES TOP OF PILASTER

F.S. ----- INDICATES FAR SIDE OF WALL

T.O.S. ----- INDICATES TOP OF STEEL LEDGER

NOTES

1. REFER TO ARCHITECTURAL FOR SCUPPER OPENINGS & EXTERIOR REVEALS.
2. SEE SHEET S300 FOR BALANCE OF REBARS NOT SHOWN IN THIS SHEET.

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING ▫ STRUCTURAL ▫ ENGINEERS
3430 Irvine Avenue▫Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD

LANCASTER READINESS CENTER

CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'–0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

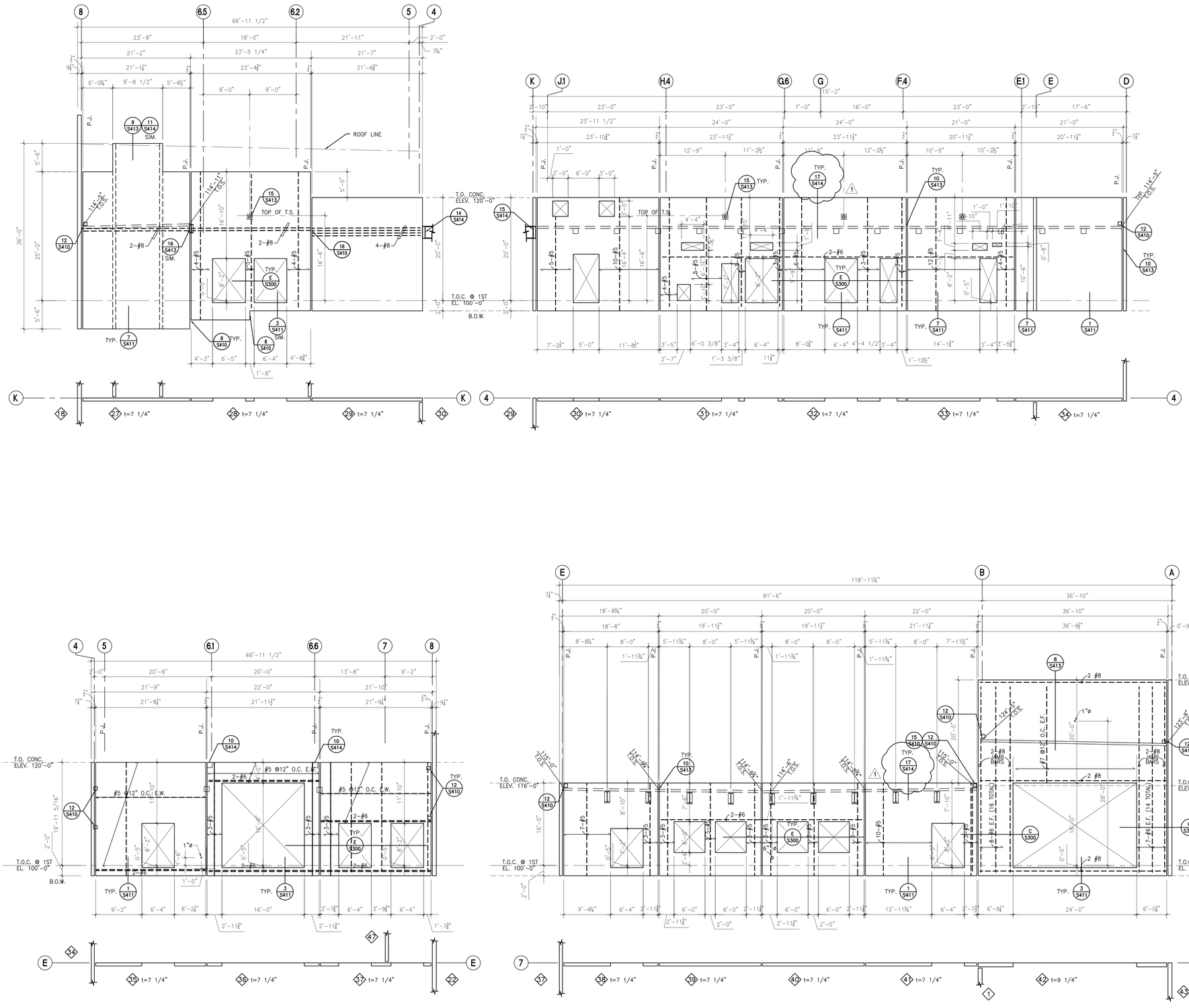
WALL PANEL
ELEVATION

AM–02

Designed By:
Drawn By: RR
Checked By:
Drawing No.
S302

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200–25–153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA



LEGEND

FOW ----- FACE OF WALL
TOC ----- INDICATES TOP OF CONCRETE
F.F. ----- INDICATES FIRST FLOOR LINE
BOW ----- INDICATES BOTTOM OF WALL
BOS ----- INDICATES BOTTOM OF STEEL DECK
TOP ----- INDICATES TOP OF PILASTER
F.S. ----- INDICATES FAR SIDE OF WALL
T.O.S. ----- INDICATES TOP OF STEEL LEDGER

NOTES

1. REFER TO ARCHITECTURAL FOR SCUPPER OPENINGS & EXTERIOR REVEALS.
2. SEE SHEET S300 FOR BALANCE OF REBARS NOT SHOWN IN THIS SHEET.

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

WALL PANEL ELEVATION

AM-02

Designed By:
Drawn By: RR
Checked By:

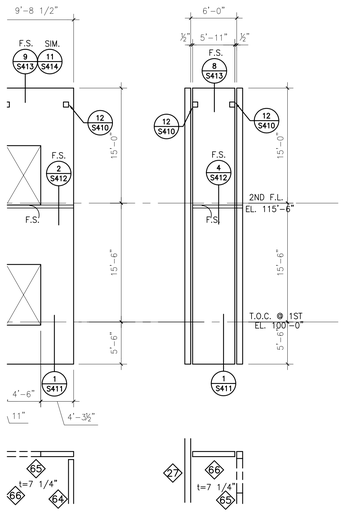
Drawing No.
S303

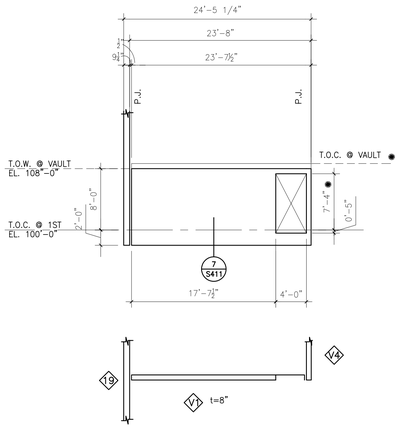
MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

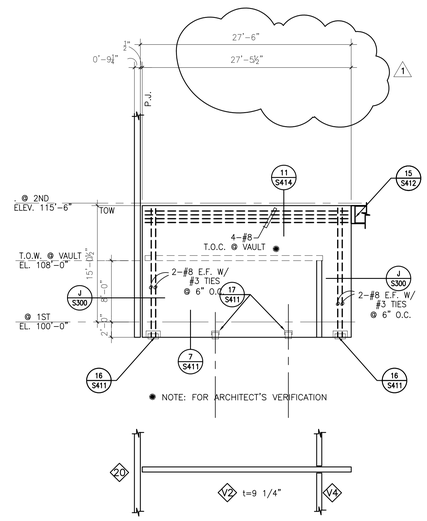
DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

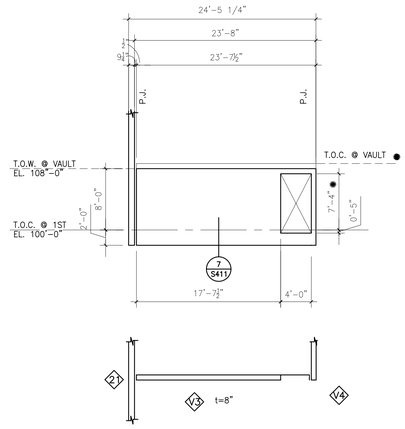
USER NAME: Alee
PLOT DATE: 09/01/2004 - 1:58PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S303.dwg

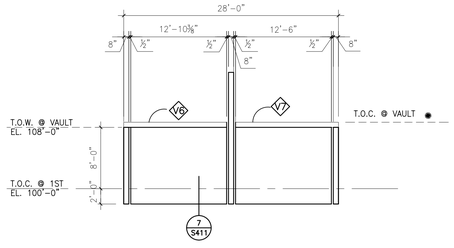
P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S303.dwg, 9/1/2004 1:58:41 PM, Acrobat Distiller.pc3

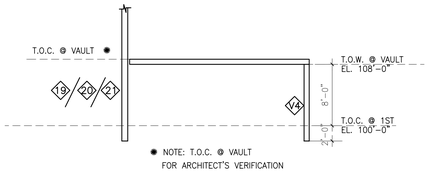


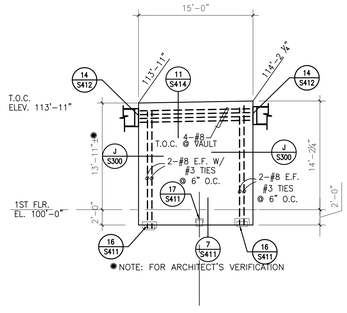


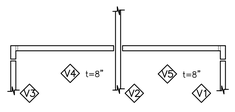


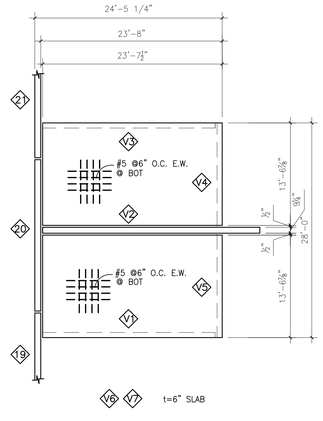


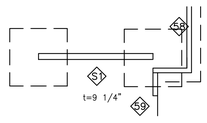












LEGEND

FOW ----- FACE OF WALL
TOC ----- INDICATES TOP OF CONCRETE
F.F. ----- INDICATES FIRST FLOOR LINE
BOW ----- INDICATES BOTTOM OF WALL
BOS ----- INDICATES BOTTOM OF STEEL DECK
TOP ----- INDICATES TOP OF PILASTER
F.S. ----- INDICATES FAR SIDE OF WALL
T.O.S. ----- INDICATES TOP OF STEEL LEDGER

NOTES

1. REFER TO ARCHITECTURAL FOR SCUPPER OPENINGS & EXTERIOR REVEALS.
2. SEE SHEET S300 FOR BALANCE OF REBARS NOT SHOWN IN THIS SHEET.

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

WALL PANEL ELEVATION

AM-02

Designed By:
Drawn By:
Checked By:

Drawing No.
S306

MODIFIED FOR SITE ADAPTATION AT:
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: JLee
PLOT DATE: 09/01/2004 - 1:58PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S306.dwg

P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S306.dwg, 9/1/2004 1:57:54 PM, Acrobat Distiller.pc3

CHORD TIE SCHEDULE

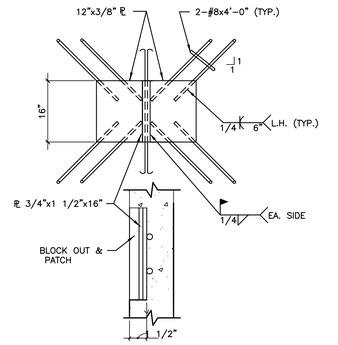
Fs = 20,000 PSI
WELD STRENGTH (FIELD WELD)
= 300#/1" OF 1/16"
∴ 1/4" WELD = 1200#/1 LENGTH
STANDARD SPLICE.

LOW HYDRO

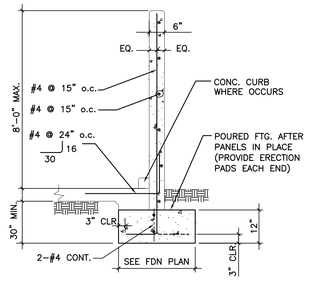
∴ PALLOW = 2x1200= 2400#/1" LENGTH

REBAR	A		SPLICE L	ANGLE LENGTH	MIN. WELD LENGTH
#4	.20		1 1/2 x 1 1/2 x 1/4	11"	5"
#5	.31		"	11"	5"
#6	.44		"	14"	6"
#7	.60		"	17"	8"
#8	.78		1 3/4 x 1 3/4 x 1/4	19"	9"
#9	1.00		2 1/2 x 2 1/2 x 1/4	23"	11"
#10	1.27		2 1/2 x 2 1/2 x 5/16	27"	13"

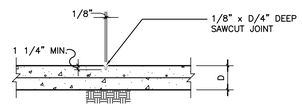
17 Detail: WEL SCHEDULE
CAD File: XMDT030 Scale: FULL SCALE



9 Detail: TRASH ENCLOSURE WALL
CAD File: XMDT030 Scale: FULL SCALE



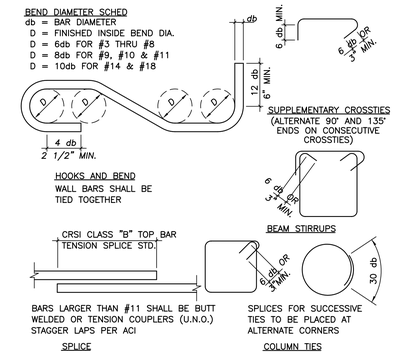
5 Detail: TYPICAL CONTROL JOINT
CAD File: XMDT030 Scale: FULL SCALE

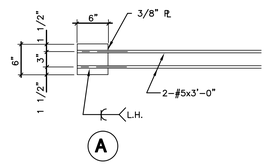


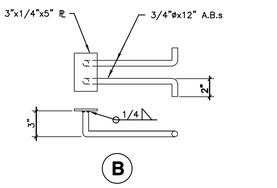
CRACK CONTROL JOINT
SEE PLAN
10' MINIMUM DIM.
MAXIMUM 2:1 RATIO
MAXIMUM SPACING NOT TO EXCEED 3xt IN FEET

t = THICKNESS IN INCHES

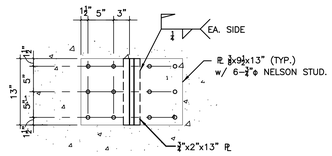
1 Detail: REINFORCING BARS BENDS AND LAPS
CAD File: XMDT030 Scale: FULL SCALE



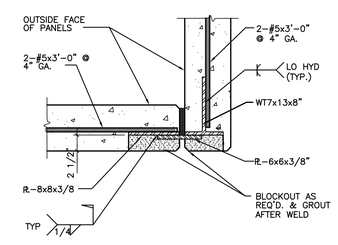




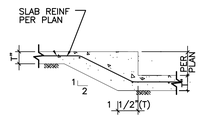
18 Detail: PANEL ANCHOR WELD
CAD File: XMDT030 Scale: FULL SCALE



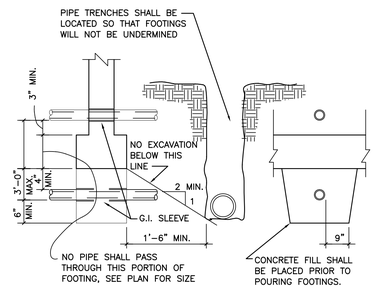
14 Detail: PANEL-PANEL CONNECTION
CAD File: XMDT030 Scale: FULL SCALE



10 Detail: PANEL JOINT AT CORNER
CAD File: XMDT030 Scale: FULL SCALE



6 Detail: TYPICAL SLAB DEPRESSION
CAD File: XMDT030 Scale: FULL SCALE

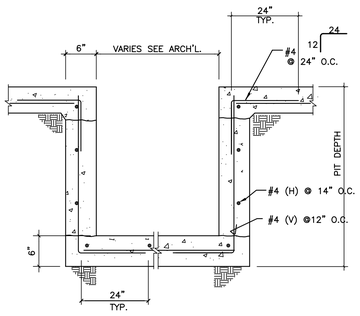


NO PIPES PERMITTED IN OR THROUGH FOOTING, PROPER CONCRETE FILL SHALL BE SAME WIDTH AS FOOTING PAD AND FULL WIDTH OF PIPE TRENCH. FOOTING SHALL BE STEPPED SO THAT CONCRETE FILL DOES NOT EXCEED 3'-0" ABOVE PIPE INVERT.

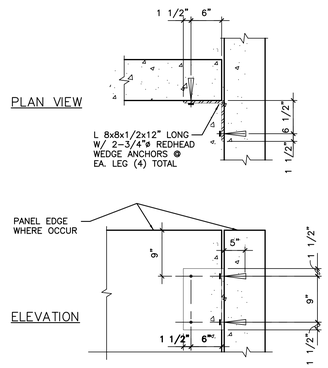
NOTE:

G.I. = GALVANIZED IRON

2 Detail: PIPE AND TRENCH LOCATION
CAD File: XMDT030 Scale: FULL SCALE

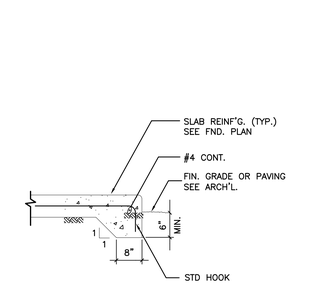


19 Detail: ELEVATOR PIT DETAIL
CAD File: XMDT030 Scale: FULL SCALE

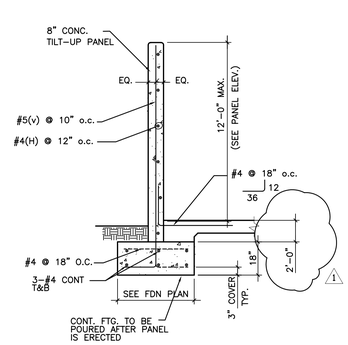


15 Detail: PANEL TO PANEL CONN.
CAD File: XMDT030 Scale: FULL SCALE

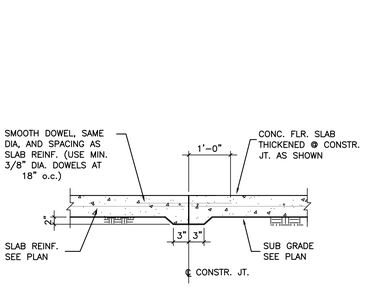
11



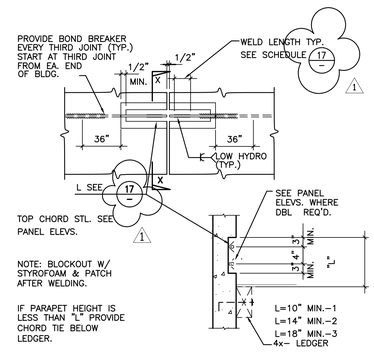
7 Detail: SLAB EDGE
CAD File: XMDT030 Scale: FULL SCALE



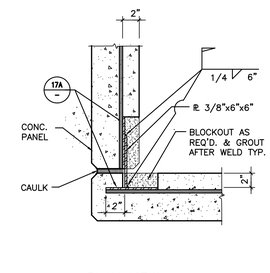
3 Detail: WALL DETAIL
CAD File: XMDT030 Scale: FULL SCALE



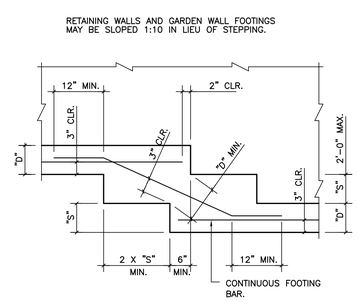
20 Detail: TYPICAL CONSTRUCTION JOINT
CAD File: XMDT030 Scale: FULL SCALE



16 Detail: CORD TIE CONN.
CAD File: XMDT030 Scale: FULL SCALE



12 Detail: PANEL CORNER
CAD File: XMDT030 Scale: FULL SCALE



8 Detail: STEPPED FOOTING
CAD File: XMDT030 Scale: FULL SCALE

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

STRUCTURAL DETAILS

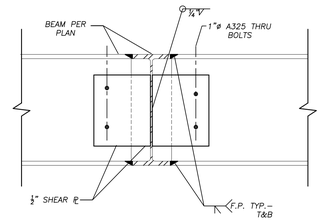
AM-02

Designed By:
Drawn By:
Checked By:

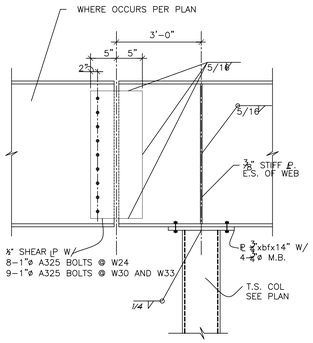
Drawing No.
S410

USER NAME: ALee
PLOT DATE: 09/01/2004 - 1:57PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S410.dwg

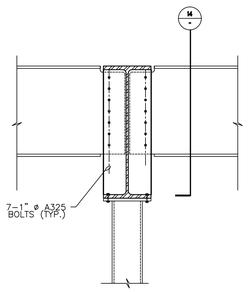
P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S410.dwg, 9/1/2004 1:56:55 PM, Acrobat Distiller.pc3



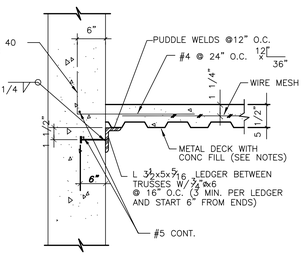
16 Detail: **BEAM TO BEAM** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



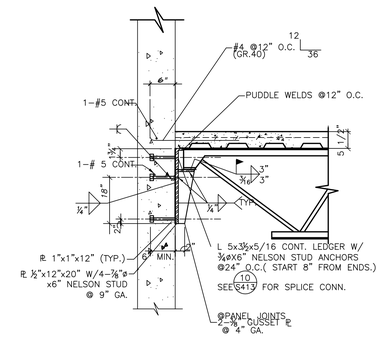
12 Detail: **CANTL BEAM CONN.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



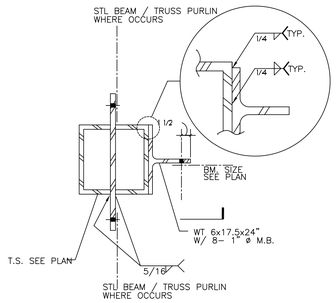
8 Detail: **GIRDER TO GIRDER ● COL.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



4 Detail: **TRUSS CONN. ● WALL (FLOOR)** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"

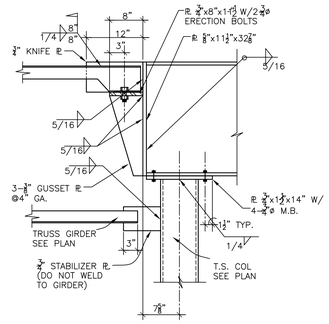


1 Detail: **TRUSS CONN. ● WALL (FLOOR)** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"

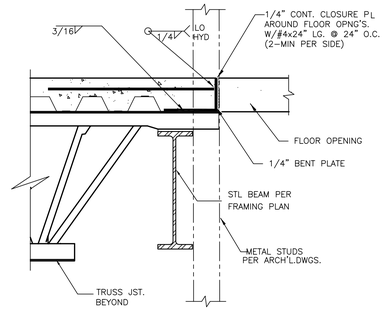


PLAN VIEW

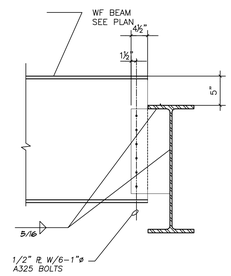
17 Detail: **BEAM ● COL.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



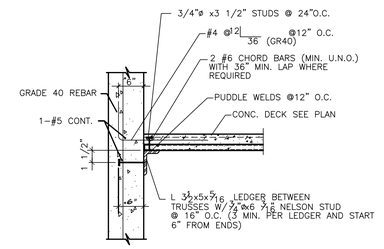
13 Detail: **TRUSS TO BEAM CONN** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



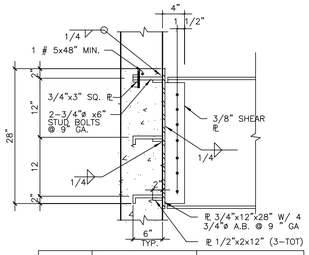
9 Detail: **FLOOR OPENING REINF. DETAIL** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



5 Detail: **BEAM TO BEAM CONN** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"

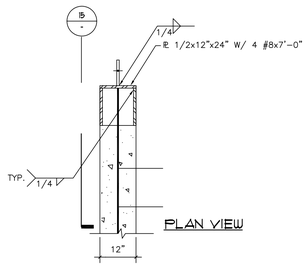


2 Detail: **LEDGER DETAIL (FLOOR)** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



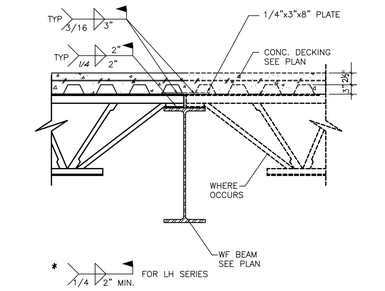
BEAM SIZE	PLATE LENGTH (L)	SIZE & NO. OF BOLTS
W12x	10"	3–3/4"ø A325
W14x	12"	4–7/8"ø A325
W16x	12"	4–7/8"ø A325
W18x	15"	5–7/8"ø A325
W21x	18"	6–7/8"ø A325
W24x	21"	7–1"ø A325
W27x	24"	8–1"ø A325
W30x	26"	8–1"ø A325

18 Detail: **BEAM ● WALL** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"

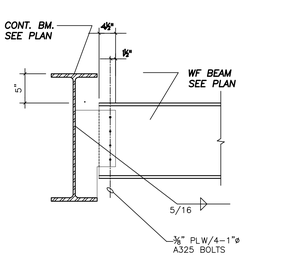


PLAN VIEW

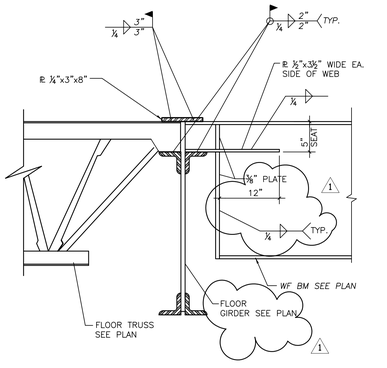
14 Detail: **STRUCT CONN.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



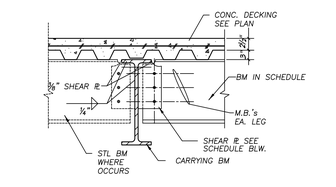
10 Detail: **TRUSS TO TRUSS ● STEEL BM** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



6 Detail: **BEAM TO BEAM CONN.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"

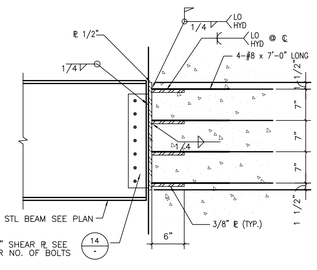


3 Detail: **PURLIN TO GIRDER CONN.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"

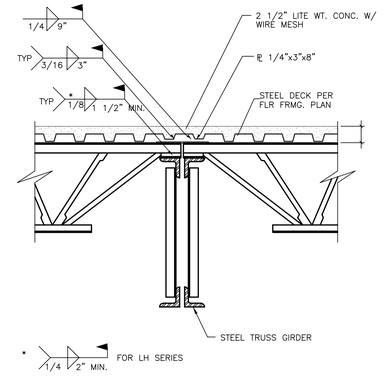


BEAM SIZE	PLATE LENGTH (L)	SIZE & NO. OF BOLTS
W12x	10"	3–¾"ø A325
W14x	12"	4–⅞"ø A325
W16x	12"	4–⅞"ø A325
W18x	15"	5–⅞"ø A325
W21x	18"	6–⅞"ø A325
W24x	21"	7–1"ø A325
W27x	24"	8–⅞"ø A325
W30x	26"	8–1"ø A325

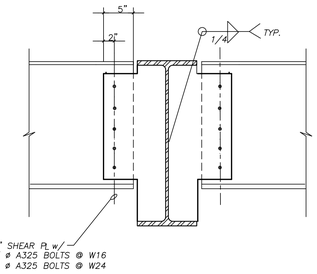
19 Detail: **BEAM TO BEAM CONN.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



15 Detail: **STEAL BEAM TO WALL CONN.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



11 Detail: **TRUSS TO TRUSS DETAIL** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"



7 Detail: **BEAM TO BEAM CONN.** — CAD File: XMDT030 — Scale: FULL SCALE 0 1" 2"

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200–25–153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JE JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503–3400 FAX (714) 503–3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263–1308 FAX (949) 263–1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

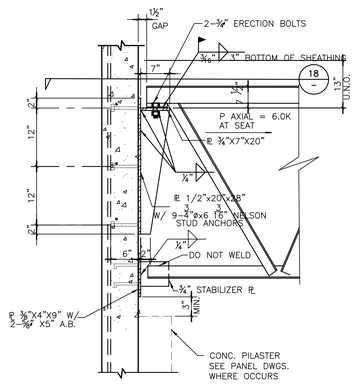
STRUCTURAL DETAILS

AM–02

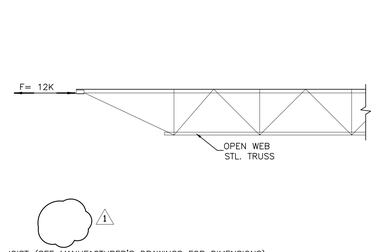
Designed By: W.M
Drawn By:
Checked By:
Drawing No. **S412**

USER NAME: ALee
PLOT DATE: 09/01/2004 – 1:56PM
FILENAME: P:\(F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S412.dwg

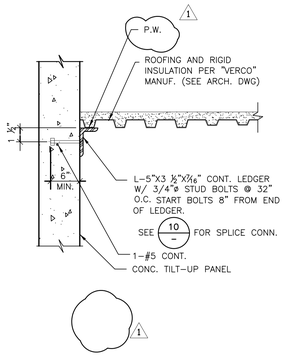
P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S412.dwg, 9/1/2004 1:55:54 PM, Acrobat Distiller.pc3



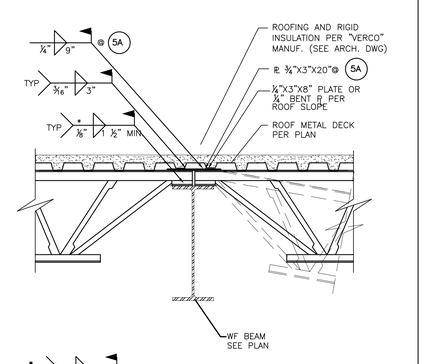
17 Detail: **TRUSS GIRDER • WALL** — CAD File: XMDT030 — Scale: FULL SCALE



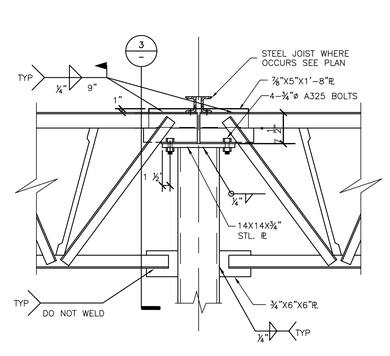
13 Detail: **TRUSS LOADING DETAIL (U.N.O.)** — CAD File: XMDT030 — Scale: FULL SCALE



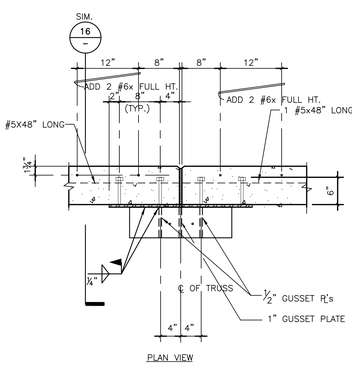
9 Detail: **LEDGER DETAIL (ROOF)** — CAD File: XMDT030 — Scale: FULL SCALE



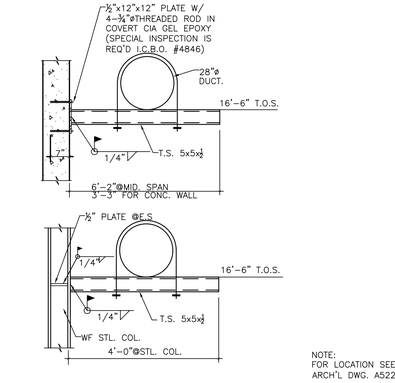
5 Detail: **(ROOF) TRUSS TO TRUSS DETAIL** — CAD File: XMDT030 — Scale: FULL SCALE



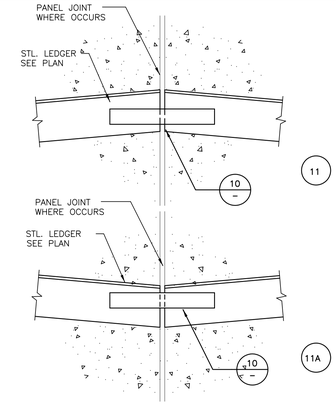
1 Detail: **GIRDER TO GIRDER • COL.** — CAD File: XMDT030 — Scale: FULL SCALE



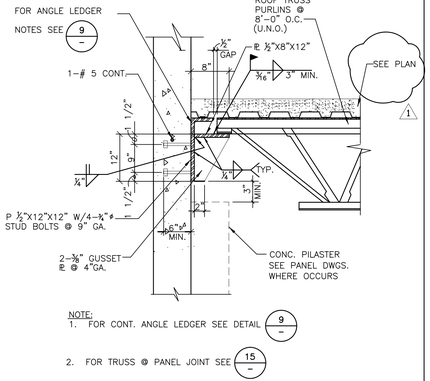
18 Detail: **TRUSS GIRDER • WALL** — CAD File: XMDT030 — Scale: FULL SCALE



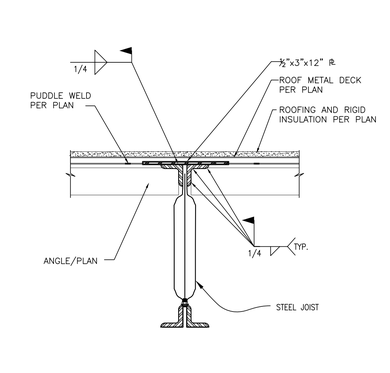
14 Detail: **TRUSS TO TRUSS • COL.** — CAD File: XMDT030 — Scale: FULL SCALE



10 Detail: **TYPICAL LEDGER SPLICE CONN.** — CAD File: XMDT030 — Scale: FULL SCALE



6 Detail: **TRUSS TO TRUSS DETAIL** — CAD File: XMDT030 — Scale: FULL SCALE



2 Detail: **TRUSS TO TRUSS • COL.** — CAD File: XMDT030 — Scale: FULL SCALE

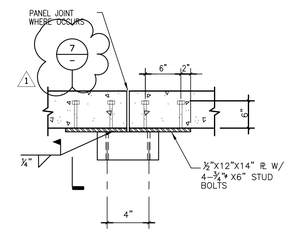
19 Detail: **TRUSS GIRDER • PANEL JOINT** — CAD File: XMDT030 — Scale: FULL SCALE

15 Detail: **AIR DUCT SUPPORT DETAIL** — CAD File: XMDT030 — Scale: FULL SCALE

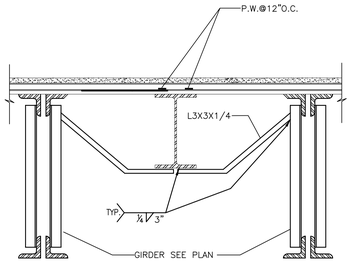
11 Detail: **LEDGER SPLICE • SLOPE BREAK** — CAD File: XMDT030 — Scale: FULL SCALE

7 Detail: **TRUSS SEAT DETAIL** — CAD File: — Scale: FULL SCALE

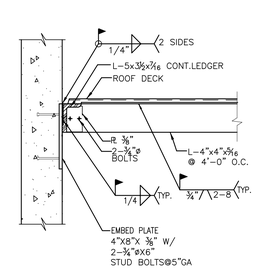
3 Detail: **CROSS TIE DETAIL** — CAD File: XMDT030 — Scale: FULL SCALE



16 Detail: **TRUSS • PANEL JOINT** — CAD File: XMDT030 — Scale: FULL SCALE



12 Detail: **BRACE • STEEL BM.** — CAD File: XMDT030 — Scale: FULL SCALE



8 Detail: **WALL ANCHOR DETAIL** — CAD File: — Scale: FULL SCALE

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200–25–153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503–3400 FAX (714) 503–3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263–1308 FAX (949) 263–1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

STRUCTURAL DETAILS

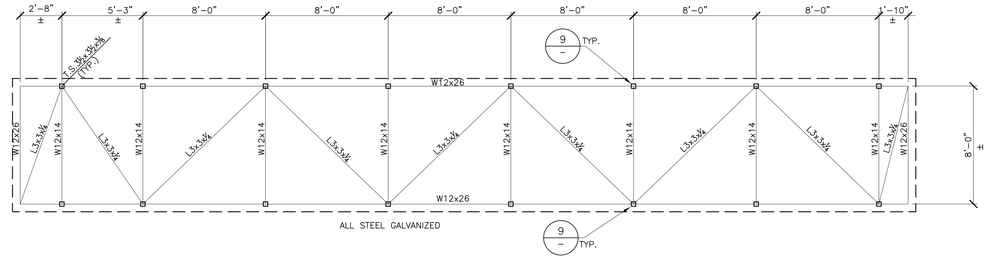
AM–02

Designed By:
Drawn By:
Checked By:

Drawing No.
S413

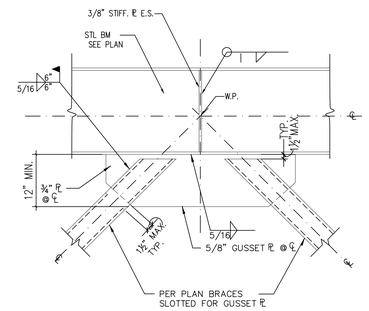
USER NAME: ALee
PLOT DATE: 09/01/2004 – 1:54PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S413.dwg

P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S413.dwg, 9/1/2004 1:54:48 PM, Acrobat Distiller.pc3

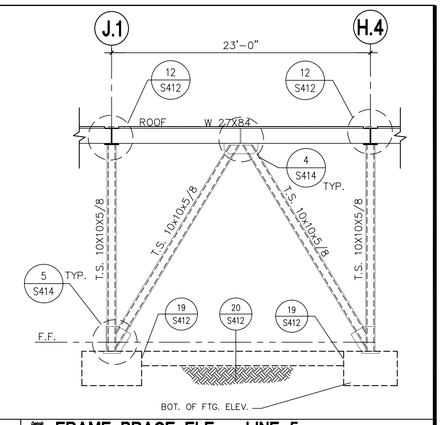


SCALE: ¼"=1'-0"

16 Detail: **ELEVATED STEEL PLATFORM PLAN • LOW ROOF**
CAD File: Scale: FULL SCALE

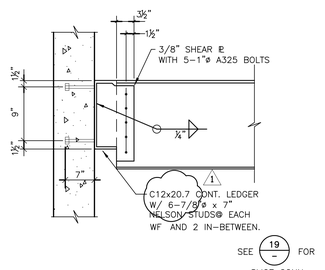


4 Detail: **BRACE DETAIL**
CAD File: XMDT030 Scale: FULL SCALE

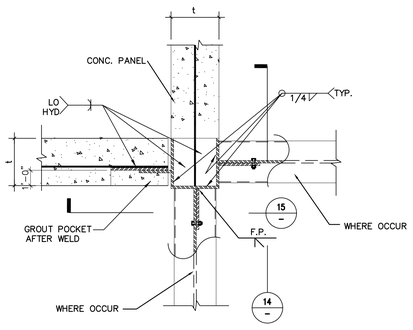


1 Detail: **FRAME BRACE ELE. • LINE 5**
CAD File: XMDT030 Scale: FULL SCALE

17 Detail:
CAD File: XMDT030 Scale: FULL SCALE

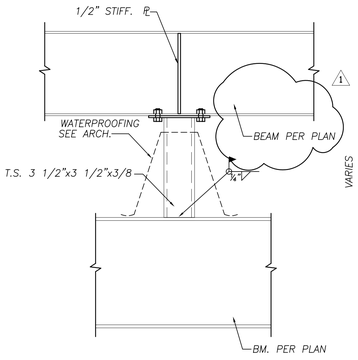


13 Detail: **STRUT CONN.**
CAD File: XMDT030 Scale: FULL SCALE

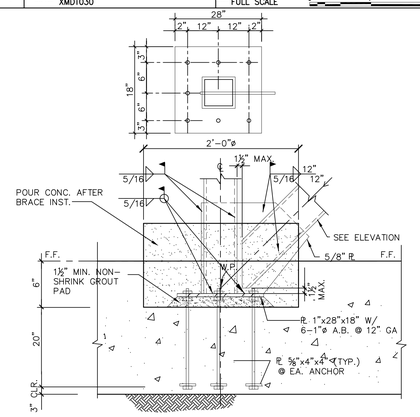


PLAN VIEW

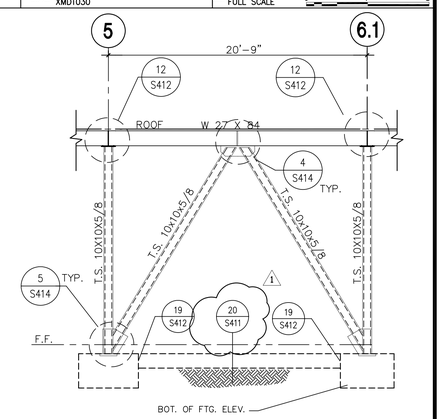
9 Detail: **PLATFORM DETAIL**
CAD File: XMDT030 Scale: FULL SCALE



5 Detail: **STEEL BRACED FRAME ELE.**
CAD File: XMDT030 Scale: FULL SCALE

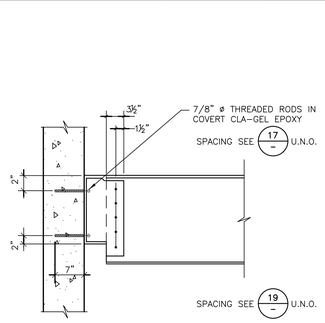


2 Detail: **FRAME BRACE ELE. • LINE E.1**
CAD File: XMDT030 Scale: FULL SCALE

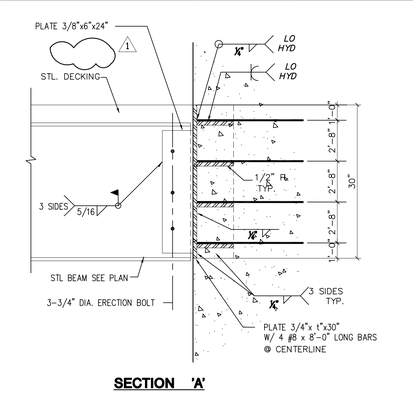


3 Detail: **FRAME BRACE ELE. • LINE J.1**
CAD File: XMDT030 Scale: FULL SCALE

18 Detail:
CAD File: XMDT030 Scale: FULL SCALE

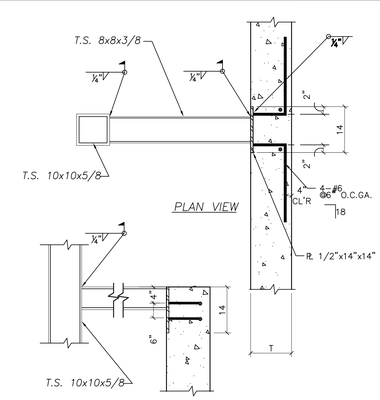


14 Detail: **STRUT CONN.**
CAD File: XMDT030 Scale: FULL SCALE

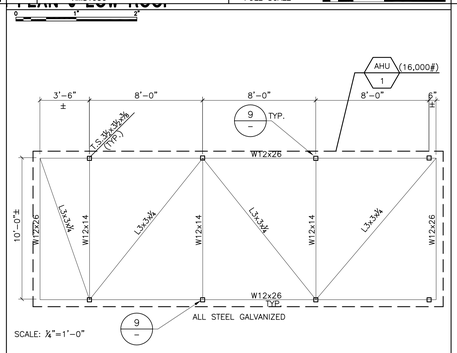


SECTION 'A'

10 Detail: **WALL TO STEEL COL.**
CAD File: XMDT030 Scale: FULL SCALE

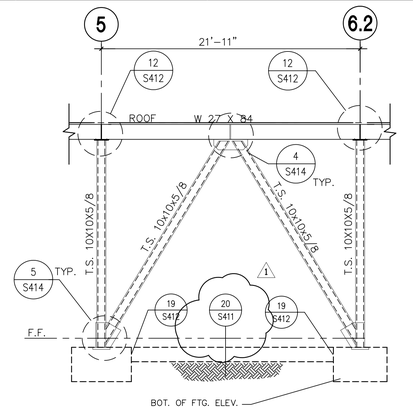


6 Detail: **ELEVATED STEEL PLATFORM PLAN**
CAD File: XMDT030 Scale: FULL SCALE

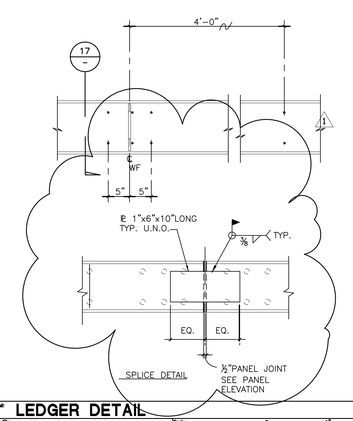


SCALE: ¼"=1'-0"

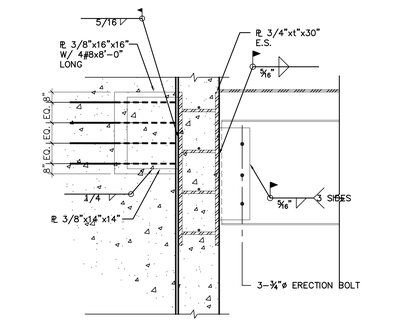
3 Detail: **FRAME BRACE ELE. • LINE J.1**
CAD File: XMDT030 Scale: FULL SCALE



19 Detail: **LEDGER DETAIL**
CAD File: Scale: FULL SCALE

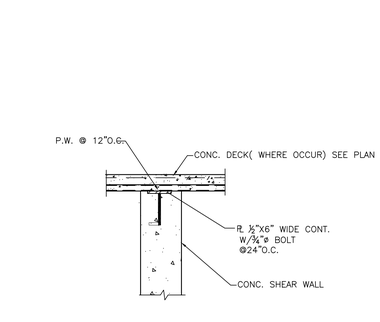


15 Detail: **STRUT CONN.**
CAD File: Scale: FULL SCALE

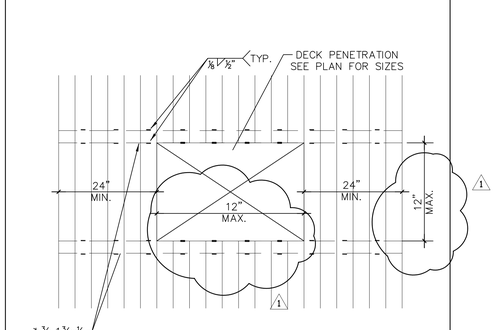


SECTION 'B'

11 Detail: **SHEAR WALL TO STEEL DECK**
CAD File: Scale: FULL SCALE



7 Detail: **TYP. DECK REINF. • PENETRATION TYP. U.N.O.**
CAD File: XMDT030 Scale: FULL SCALE



MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:

STRUCTURAL DETAILS

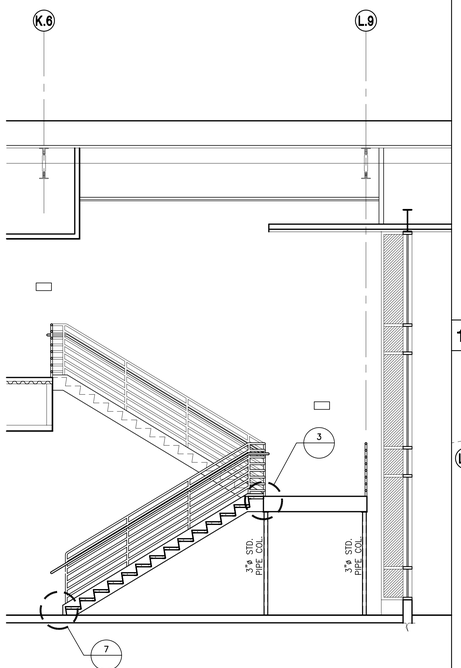
AM-02

Designed By:
Drawn By:
Checked By:

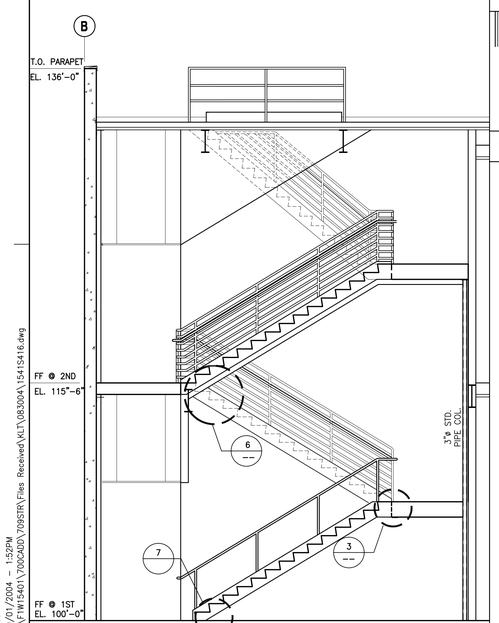
Drawing No.
S414

USER NAME: ALee
PLOT DATE: 09/01/2004 - 1:53PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S414.dwg

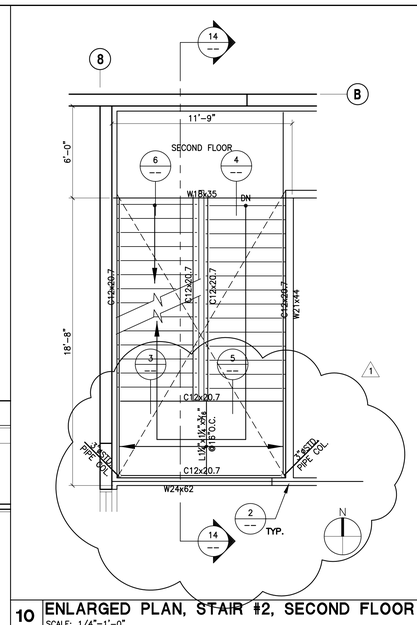
P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S414.dwg, 9/1/2004 1:53:41 PM, Acrobat Distiller.pc3



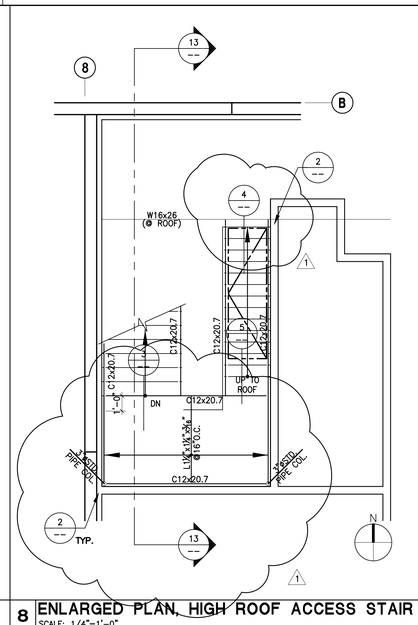
13 ENLARGED SECTION, STAIR #1
SCALE: 1/4"=1'-0"



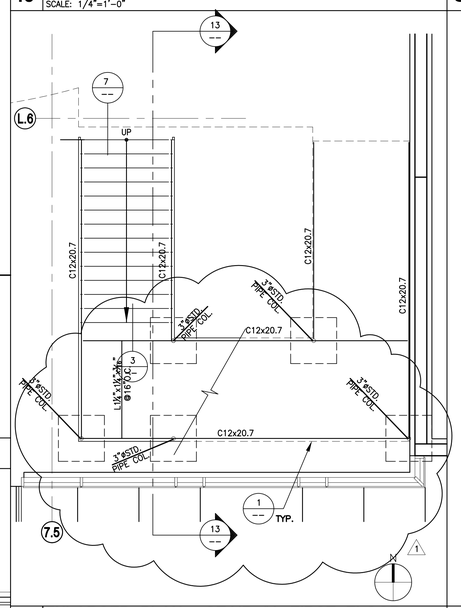
14 ENLARGED SECTION, STAIR #2
SCALE: 1/4"=1'-0"



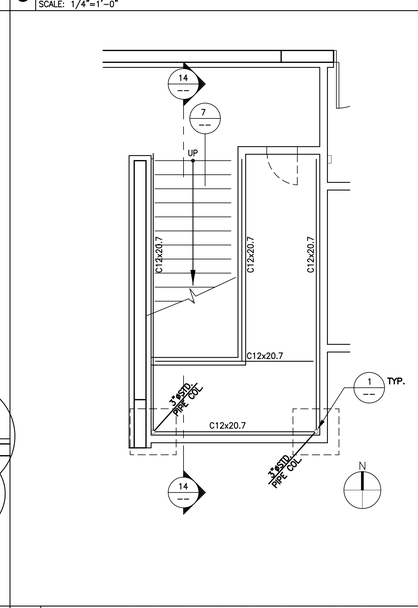
10 ENLARGED PLAN, STAIR #2, SECOND FLOOR
SCALE: 1/4"=1'-0"



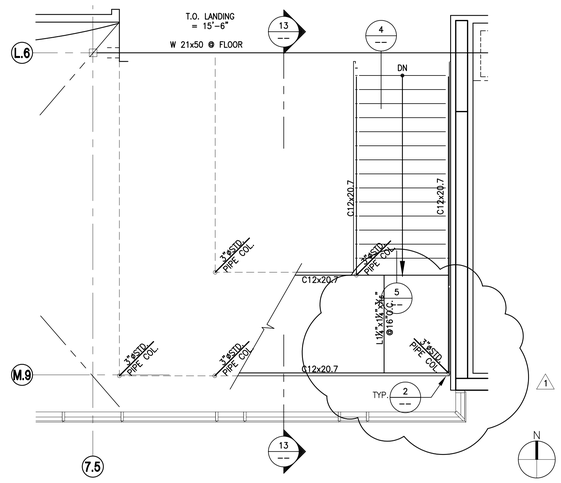
8 ENLARGED PLAN, HIGH ROOF ACCESS STAIR #2
SCALE: 1/4"=1'-0"



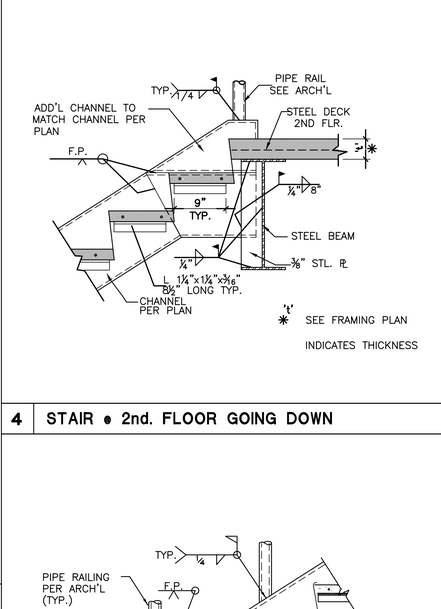
11 ENLARGED PLAN , STAIR #1, FIRST FLOOR
SCALE: 1/4"=1'-0"



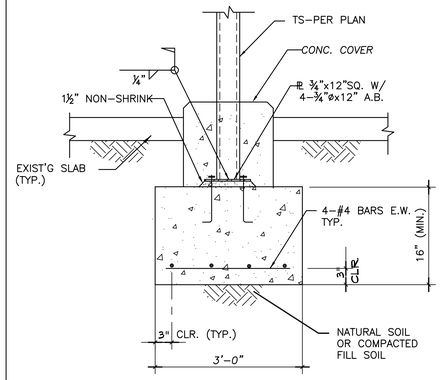
9 ENLARGED PLAN , STAIR #2, FIRST FLOOR
SCALE: 1/4"=1'-0"



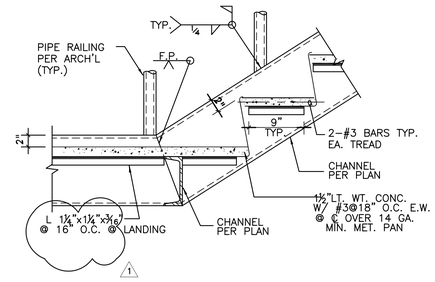
12 ENLARGED PLAN , STAIR #1, SECOND FLOOR
SCALE: 1/4"=1'-0"



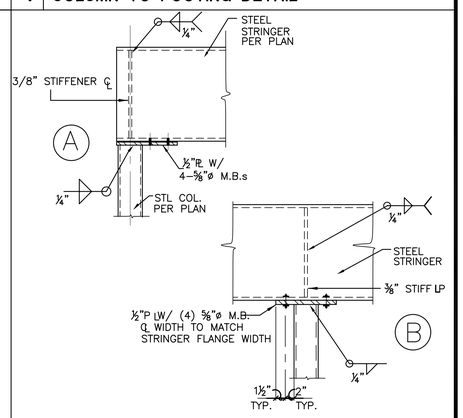
4 STAIR ● 2nd. FLOOR GOING DOWN



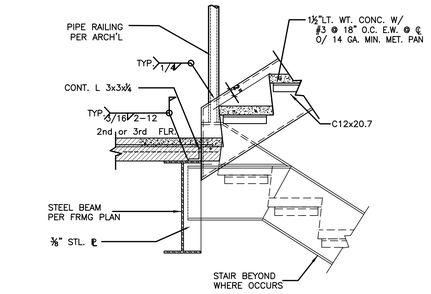
1 COLUMN TO FOOTING DETAIL



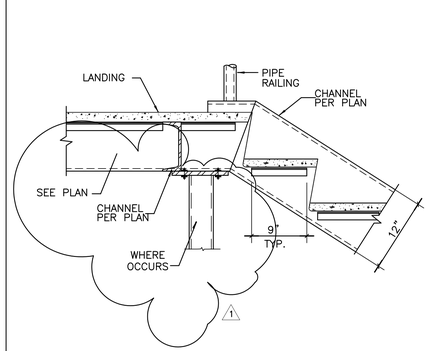
5 STEEL STRINGER ● LANDING



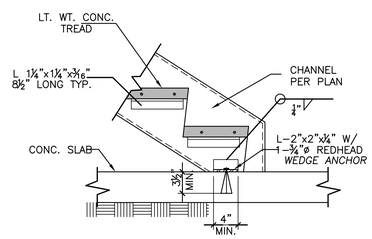
2 STRINGER TO COLUMN DETAIL



6 STAIR ● 2ND FLOOR, GOING UP
SCALE:



3 STEEL STRINGER ● LANDING



7 STAIR ● CONC. FLOOR SLAB

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

KLT
CONSULTING = STRUCTURAL = ENGINEERS
3430 Irvine Avenue=Newport Beach,California 92660
(949) 263-1308 FAX (949) 263-1310

Seal:

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:
0 4' 8' 12'
SCALE: 1/4"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297
Drawing Title:
STAIRS 1, 2, & ROOF ACCESS ENLARGED PLANS & SECTIONS
AM-02

Designed By: RB
Drawn By: JE
Checked By: SD
Drawing No.
S416

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: ALee
PLOT DATE: 09/01/2004 - 1:52PM
FILENAME: P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S416.dwg

P:\F1W15401\700CADD\709STR\Files Received\KLT\083004\1541S416.dwg, 9/1/2004 1:51:43 PM, Acrobat Distiller.pc3

VAV TERMINAL BOX SCHEDULE

SYMBOL	BASIS OF DESIGN OR EQUAL	AREA SERVED	CFM		MIN S.P. AT INLET	INLET SIZE DIA IN	HEATING COIL DATA							PIPE CONN. SIZE	OPER. WT. (LBS.)	REMARKS
			MAX	MIN			MBH	AIR		WATER						
								ENT. (°F)	LVG. (°F)	MIN. GPM	ENT. (°F)	LVG. (°F)	MAX. △P (FT)			
VAV-1	TITUS DESV	ROOM 1206	1,100	330	1.0	10ø"	13.2	55	**95**	1	**180**	**150**	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-2	TITUS DESV	ROOM 1207	1,950	585	1.0	12ø"	23.4	55	95	2	180	150	5	3/4"	55	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-3	TITUS DESV	ROOM 1207	1,950	585	1.0	12ø"	23.4	55	95	2	180	150	5	3/4"	55	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-4	TITUS DESV	ROOM 1208	300	90	1.0	6ø"	3.6	55	95	.3	180	150	5	3/4"	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-5	TITUS DESV	ROOMS 1209 1210 & 1211	750	225	1.0	8ø"	9.0	55	95	1	180	150	5	3/4"	35	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-6	TITUS DESV	ROOM 1216	1,200	360	1.0	10ø"	14.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-7	TITUS DESV	ROOM 1217	1,200	360	1.0	10ø"	14.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-8	TITUS DESV	ROOM 1218	1,200	360	1.0	10ø"	14.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-9	TITUS DESV	ROOM 1219	1,200	480	1.0	10ø"	14.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-10	TITUS DESV	ROOM 1230	300	90	1.0	6ø"	3.6	55	95	.3	180	150	5	3/4"	30	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-11	TITUS DESV	ROOM 1227, 1228 & 1229	750	225	1.0	8ø"	9.0	55	95	1	180	150	5	3/4"	35	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-12	TITUS DESV	IDF 1223	300	120	1.0	6ø"	–	–	–	–	–	–	–	–	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-13	TITUS DESV	TOILETS 1213 & 1215	800	240	1.0	8ø"	9.6	55	95	1	180	150	5	3/4"	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-14	TITUS DESV	LOBBY 1201	850	255	1.0	10ø"	10.2	55	95	1	180	150	5	3/4"	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-15	TITUS DESV	ROOM 1212	900	270	1.0	10ø"	10.8	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-16	TITUS DESV	ROOM 1224	900	270	1.0	10ø"	10.8	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-17	TITUS DESV	ROOM 1225	900	270	1.0	10ø"	10.8	55	95	1	180	150	5	3/4"	35	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-18	TITUS DESV	ROOM 1226	1,200	360	1.0	10ø	14.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-19	TITUS DESV	ROOM 1226	1,200	360	1.0	10ø	14.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-20	TITUS DESV	CORRIDOR 1205	1,400	420	1.0	10ø	16.8	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-21	TITUS DESV	LOBBY 1101	1,000	300	1.0	10ø"	12.0	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-22	TITUS DESV	ROOM 1144	500	150	1.0	8ø"	6.0	55	95	.5	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-23	TITUS DESV	ROOM 1142	1,900	570	1.0	12ø"	22.78	55	95	1.5	180	150	5	3/4"	–	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-24	TITUS DESV	ROOM 1143	500	150	1.0	8ø"	6.0	55	95	.5	180	150	5	3/4"	–	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-25	TITUS DESV	LOBBY 1101, 1102	760	220	1.0	8ø"	9.0	55	95	1	180	150	5	3/4"	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-26	TITUS DESV	LIBRARY 1145	900	270	1.0	10ø"	10.8	55	95	1	180	150	5	3/4"	35	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-27	TITUS DESV	ROOM 1128	400	120	1.0	6ø"	4.8	55	95	.5	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-28	TITUS DESV	ROOMS 1137 1160	1,000	300	1.0	10ø"	12	55	95	1	180	150	5	3/4"	35	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-29	TITUS DESV	ROOM 1112	400	120	1.0	6ø"	4.8	55	95	.5	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-30	TITUS DESV	ROOM 1108	400	120	1.0	6ø"	4.8	55	95	.5	180	150	5	3/4"	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-31	TITUS DESV	ROOMS 1131 1134	500	150	1.0	8ø"	6.0	55	95	.5	180	150	5	3/4"	35	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-32	TITUS DESV	ROOM 1114	300	80	1.0	6ø"	–	–	–	–	–	–	–	–	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-33	TITUS DESV	ROOM 1118	1,200	360	1.0	10ø"	14.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-34	TITUS DESV	ROOM 1121	300	90	1.0	6ø"	3.6	55	95	.3	180	150	5	3/4"	32	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-35	TITUS DESV	COORIDOR 1141	950	285	1.0	10ø"	11.4	55	95	1	180	150	5	3/4"	45	DDC CONTROLLED PRESSURE INDEPENDENT
VAV-36	TITUS DESV	1011,1103, IT 1203, IT1204	600	0	1.0	8ø"	–	–	–	–	–	–	–	–	35	DDC CONTROLLED PRESSURE INDEPENDENT

SPLIT SYSTEM FAN COIL UNIT (INDOOR) SCHEDULE

SYMBOL	BASIS OF DESIGN OR EQUAL	AREA SERVED	CFM	ELECTRICAL DATA				FILTERS (CLEANABLE) NO. OF & SIZE	OPER. WT. (LBS.)	REMARKS
				VOLTS	PHASE	HZ	FAN FLA			
FC 1	CARRIER 4DQNB012 (1TON)	IDF ROOM 1104	260	120	1	60	0.23	SUPPLIED W/UNIT	25	① ② ③
FC 2	CARRIER 4DQNB012 (1TON)	IT ROOM 1203	260	120	1	60	0.23	SUPPLIED W/UNIT	25	① ② ③
FC 3	CARRIER 4DQNB012 (1TON)	IT ROOM 1204	260	120	1	60	0.23	SUPPLIED W/UNIT	25	① ② ③
FC 4	CARRIER 4DQNB012 (1TON)	IT ROOM 1223	260	120	1	60	0.23	SUPPLIED W/UNIT	25	① ② ③

① SYSTEM MODEL No. 53QNB012 ② INDOOR FAN COIL MUST BE CONNECTED TO OUTDOOR UNIT. ③ WALL MOUNTING BRACKET AND WIRELESS CONTROLLER BY UNIT MANUFACTURER.

SPLIT SYSTEM CONDENSING UNIT (OUTDOOR) SCHEDULE

SYMBOL	BASIS OF DESIGN OR EQUAL	UNIT SERVED	COOLING CAPACITY (BTUH)		SEER	ELECTRICAL DATA			COMPRESSOR		FAN MOTOR F.L.A.	② MCA	② MOCP	② FLA	OPER. WT. (LBS.)	REMARKS
			TOTAL	SENSIBLE		VOLTS	PHASE	HZ	R.L.A.	L.R.A.						
CU 1	CARRIER 53QNB012 (1TON)	FC-1	12,000	11,600	11.0	120	1	60	5.5	30	3	8.5	15	8.85	155	① ② ③
CU 2	CARRIER 53QNB012 (1TON)	FC-2	12,000	11,600	11.0	120	1	60	5.5	30	3	8.5	15	8.85	155	① ② ③
CU 3	CARRIER 53QNB012 (1TON)	FC-3	12,000	11,600	11.0	120	1	60	5.5	30	3	8.5	15	8.85	155	① ② ③
CU 4	CARRIER 53QNB012 (1TON)	FC-4	12,000	11,600	11.0	120	1	60	5.5	30	3	8.5	15	8.85	155	① ② ③

① SYSTEM MODEL No. 53QNB012 ② MCA AND MOCP ARE FOR BOTH INDOOR AND OUTDOOR UNITS ③ SYSTEM No. 53QNB012-3 PROVIDE W/ ACCESSORY CRANKCASE HEATER.

SPLIT SYSTEM A/C UNIT MOUNTING NOTE:
INDOOR UNIT:
MOUNT HIGH ON WALL AS SHOWN ON PLANS, SECURE TO STRUCTURE USING FACTORY MOUNTING BRACKETS AND TEMPLATE WITH 1/2"ø x2-1/2" ANCHOR BOLTS PER MANUAFCTURER'S INSTRUCTIONS. REFER TO MOUNTING DETAIL .

FAN COIL UNIT SCHEDULE

EQUIPMENT NUMBER	BASIS OF DESIGN	SERVICE	FAN DATA			ELECTRICAL DATA		COOLING COIL										FILTER	FAN MOTOR				REMARKS
			OSA CFM	CFM	ESP IN W.G.	MOTOR HP	FLA / WATTS	EAT °F		LAT °F		SENSIBLE CAPACITY MBH	TOTAL CAPACITY MBH	WATER °F		GPM	MAX PD FT H_2O	MIN. ROWS	EFF%	VOLTAGE	PHASES	FREQ. (HERTZ)	WEIGHT LBS	
								DB	WB	DB	WB			IN	OUT									
FC 5	CARRIER 42CKA0BALCY6AYYY	ELECTRICAL ROOM 1117	0	570	.25	1/6	2.1 / 235	80	67	59.2	57	12.9	18	42	54	3	4.2	3	30%	110	1	60	200	①
							/																	

① PROVIDE SECONDARY DRAIN PAN.

EXHAUST FAN SCHEDULE

SYMBOL	BASIS OF DESIGN OR EQUAL	MODEL	DRIVE TYPE	AREA SERVED	CFM	TOTAL SP IN W.G.	FAN RPM	MOTOR RPM	MOTOR DATA				WEIGHT LBS.	REMARKS
									WATTS/BHP	VOLT	PH	HZ		
EF 1	COOK	ACE-100B	BELT	MEN'S TOILET-1213	600	.75"	–	–	1/3	120	1	60	100	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB
EF 2	COOK	ACE-100B	BELT	WOMEN'S TOILET-1215	700	.75"	–	–	1/3	120	1	60	100	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB
EF 3	COOK	GC-620	DIRECT	ELECTRICAL ROOM 1231	400	.25"	960	–	233 WATTS	120	1	60	40	PROVIDE BACKDRAFT DAMPER AND EXHAUST ROOF VENT CAP
EF 4	COOK	GC-720	DIRECT	ELECTRICAL ROOM 1117	830	.375	1375	–	293 WATTS	120	1	60	40	PROVIDE BACKDRAFT DAMPER
EF 5	COOK	ACE-180B	BELT	WOMEN'S TOILET/ SHOWERS	3,000	1.00"	1137	–	1	460	3	60	200	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB
EF 6	COOK	ACE-150	BELT	KITCHEN	2,010	0.75"	1193	–	3/4	460	3	60	100	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB
EF 7	COOK	GC-160	DIRECT	TOILET-1122	166	.375	–	–	113 WATTS	120	1	60	15	PROVIDE BACKDRAFT DAMPER AND EXHAUST ROOF VENT CAP
EF 8	COOK	AWD-16	DIRECT	BATTERY ROOM-1119	660	.25"	1140	–	–	120	1	60	82	PROVIDE BACKDRAFT DAMPER , STAINLESS STEEL WIRE GUARD AND EXTERNAL SHUTTER. NON-EXPLOSION PROOF SPARK RESISTANT
EF 9	COOK	245-VCR-XP	BELT	KITCHEN RANGE HOOD EXHAUSTER TYPE 1	3,000	1.50"	–	–	3	460	3	60	400	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB
EF 10	COOK	195-VCR-XP	BELT	KITCHEN RANGE HOOD EXHAUSTER TYPE 2	2,250	1.00"	–	–	1.5	460	3	60	200	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB
EF 11	COOK	ACE-180B	BELT	UNIT MAINTENANCE WORKBAY-1123	2,500	1.00"	–	–	1	460	3	60	150	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB
EF 12	COOK	AWD-16	DIRECT	BOILER ROOM-1116	995	.250	–	–	1/6	120	1	60	82	PROVIDE BACKDRAFT DAMPER & STAINLESS STEEL WIRE GUARD
EF 13	COOK	GC-160	DIRECT	TOILET-1127	170	.375	1500	–	1/3	120	1	60	15	PROVIDE BACKDRAFT DAMPER AND EXHAUST ROOF VENT CAP
EF 14	COOK	ACE-100B	BELT	ELEVATOR MACHINE ROOM 1103	600	.50	1437	1750	1/4	120	3	60	100	PROVIDE BACKDRAFT DAMPER AND EXHAUST ROOF VENT CAP
EF 15	AMMERMAN	BIB-135	BELT	UNIT MAINTENANCE 1123 VEHICLE EXHAUST	3,067	4.5	2,001	3,500	3	460	3	60	300	W/BIRDSCREEN, GRAVITY DAMPER, EPOXY PAINT IN AIR STREAM, PLATE SUPPORT, TEFC MOTOR & SWITCH & WITH TWO 6', 35 FT LENGTH HOSE REEL AT 695 DEGREES F
EF 16	COOK	150-VCR-HP	BELT	EXHAUST HOOD	675	1.5	–	1750	1/2	120	1	60	100	PROVIDE BACKDRAFT DAMPER AND PREFABRICATED ROOF CURB

HOOD CALCULATIONS ①

ITEM: 50 ON A630

HOOD TYPE I
HOOD AREA : 8'-0"x 5'-0" = 40 SQ. FT.
REQUIRED CFM: Q = 75 x 40 = 3,000 CFM (MIN.)
EXHAUST DUCT AREA: 14"x14"/ 144 = 1.36 SQ. FT.
DUCT VELOCITY: 3,000 (EF-9) / 1.36 = 2,204 FPM
1500 FPM (MIN.) > 2,204 FPM (PROPOSED)< 2,500 FPM (MAX.
MIN. MAKE-UP: EXH. (CFM) 3,000x80% = 2,400 FROM UNIT No. EC-1

ITEM: 51 ON A630

HOOD TYPE II
HOOD AREA : 8'-0"x 5'-0" = 40 SQ. FT.
REQUIRED CFM: Q = 50 x 40 = 2,000 CFM (MIN.)
EXHAUST DUCT AREA: 12"x12"/ 144 = 1.0 SQ. FT.
DUCT VELOCITY: 2,000 (EF-10) / 1 = 2,000 FPM
1500 FPM (MIN.) > 2,000 FPM (PROPOSED)< 2500 FPM (MAX.
MIN. MAKE-UP: EXH. (CFM) 950x80% = 1,600 FROM UNIT No. EC-1

ITEM: 21 ON A630

HOOD TYPE I
HOOD AREA : 2'-0"x 4'-6" = 9 SQ. FT.
REQUIRED CFM: Q = 75 x 9 = 675 CFM (MIN.)
EXHAUST DUCT AREA: 8"x8"/ 144 = .44 SQ. FT.
DUCT VELOCITY: 675 (EF-16) / 0.44 = 1,518 FPM
1500 FPM (MIN.) > 1,518 FPM (PROPOSED)< 2500 FPM (MAX.
MIN. MAKE-UP: EXH. (CFM) 675x80% = 540 FROM UNIT No. EC-1

① HOOD SIZES ARE BASED ON ESTIMATED DATA, REFER TO KITCHEN PLAN AND SCHEDULE A630. VERIFY ACTUAL HOOD TYPE AND SELECT AS REQUIRED PER CMC CHAPTER 5 SECTION 509.

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

REGISTERED PROFESSIONAL ENGINEER BENJAMIN B. CHILEAN No. M27247 Exp. 06-30-07 MECHANICAL STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

ARMY NATIONAL GUARD

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
MECHANICAL SCHEDULES

AM-02

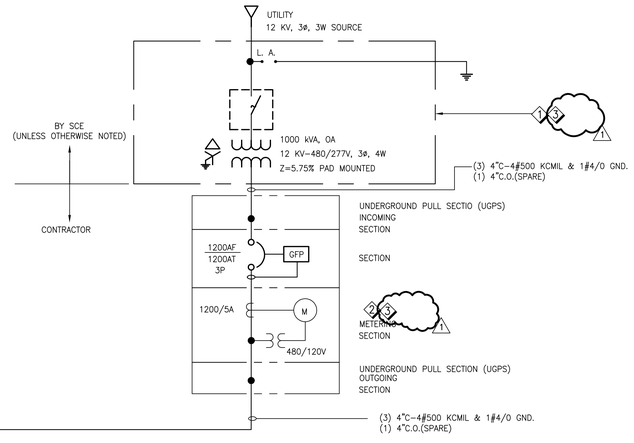
Designed By: SE
Drawn By: RMC
Checked By: BE

Drawing No.
M602

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

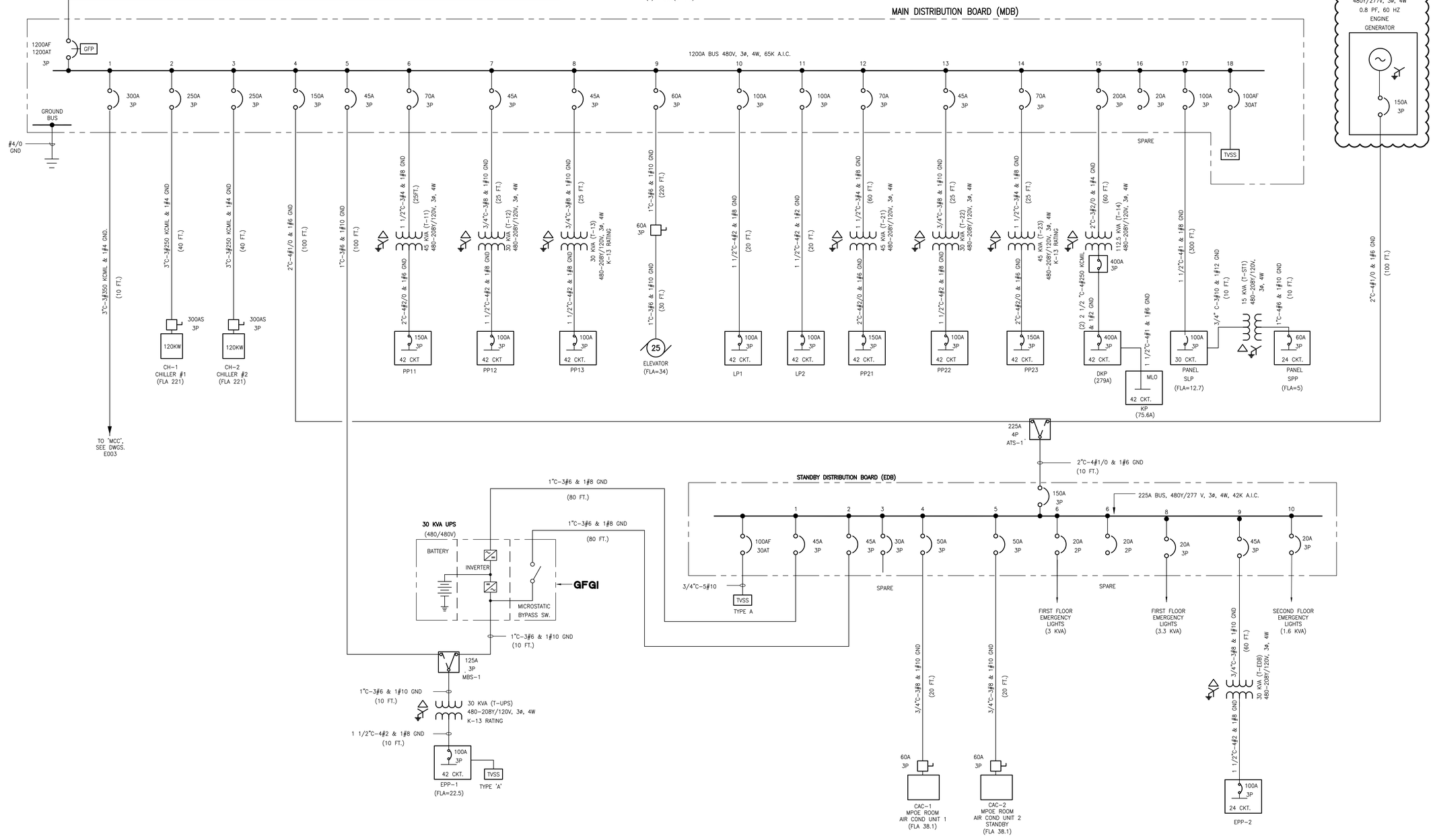
USER NAME: cdburn
PLOT DATE: 08/30/2004 - 4:22PM
FILENAME: P:\F1W15401\700CAD\105HVAC\15411M602.dwg



KEY NOTES

1. SERVICE TRANSFORMER WILL BE PROVIDED AND INSTALLED BY SOUTHERN CALIFORNIA EDISON (SCE).
2. METER, CT'S AND PT'S WILL BE PROVIDED BY SCE. CABINET WILL BE PROVIDED BY CONTRACTOR.
3. TRANSFORMER PAD AND METERING CABINET SHALL BE PER SCE STANDARD.
4. THE POINT OF CONTACT FOR UTILITY SERVICE IS AS LISTED BELOW:

   MR. DAVID PUCKETT
   SOUTHERN CALIFORNIA EDISON (SCE).
   42060 10TH STREET WEST
   LANCASTER, CA. 93534
   TEL. (661) 726-5628



1 OVERALL SINGLE LINE DIAGRAM
SCALE: NONE

USER NAME: cdburn
PLOT DATE: 08/31/2004 - 9:50AM
FILENAME: P:\F1W15401\700CADD\70ELEC\15416002.dwg

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

REGISTERED PROFESSIONAL ENGINEER
DON T. PASTRANA
No. 13274
EXP. 3-31-06
ELECTRICAL
STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

ARMY NATIONAL GUARD

Keyplan:

Scale:

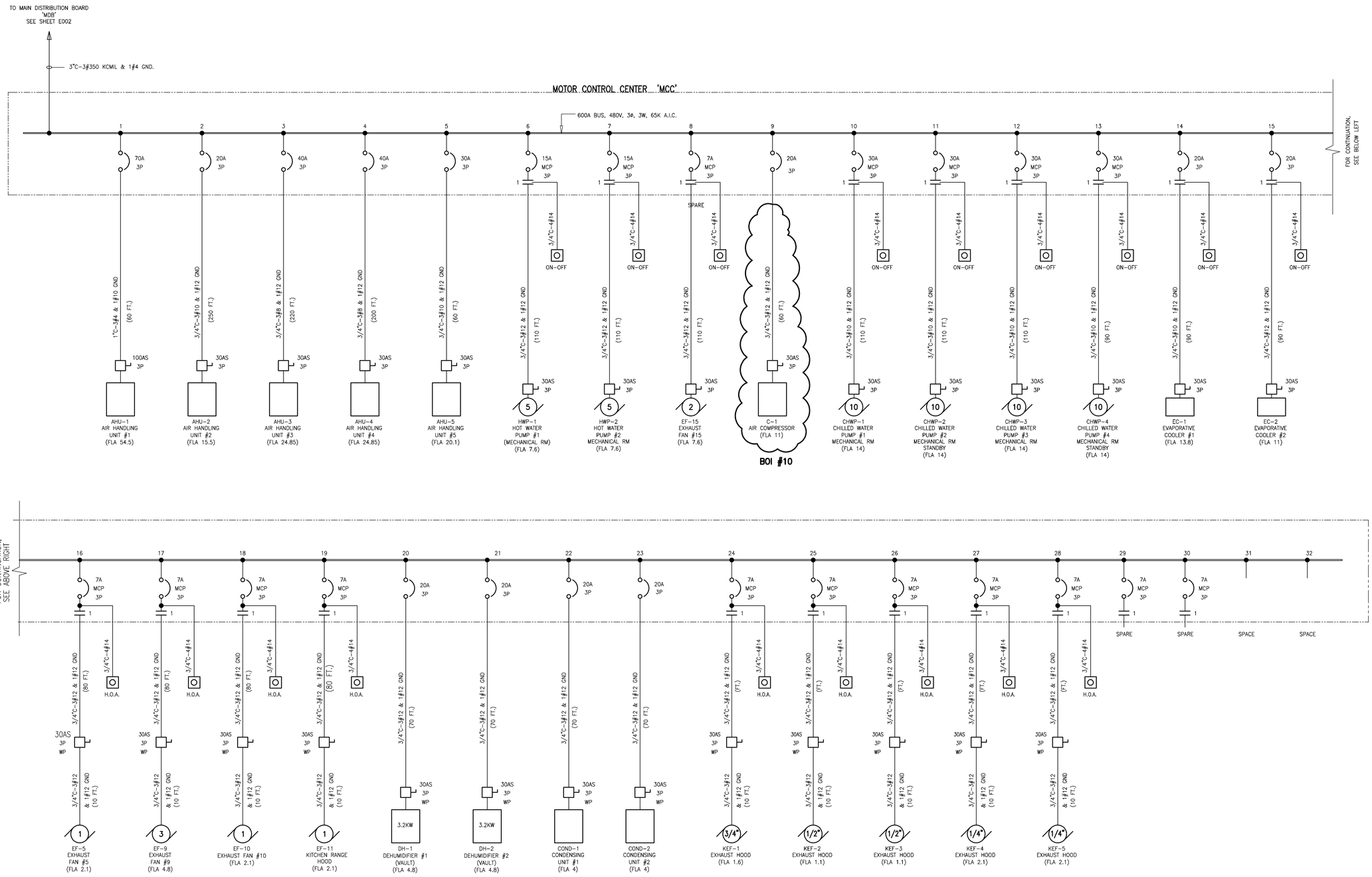
Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
ELECTRICAL OVERALL SINGLE LINE DIAGRAM

AM-02

Designed By: UL
Drawn By: JTR
Checked By: AH

Drawing No.
E002



1 **480 V MCC SINGLE LINE DIAGRAM**
SCALE: NONE

USER NAME: cdburn
PLOT DATE: 08/27/2004 - 3:17PM
FILENAME: P:\F1W15401\700CAD\70ELECT\1541E003.dwg

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

REGISTERED PROFESSIONAL ENGINEER — DON L. PASTRAMA — No. 13274 — EXP. 3-31-06 — ELECTRICAL — STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:

Scale:

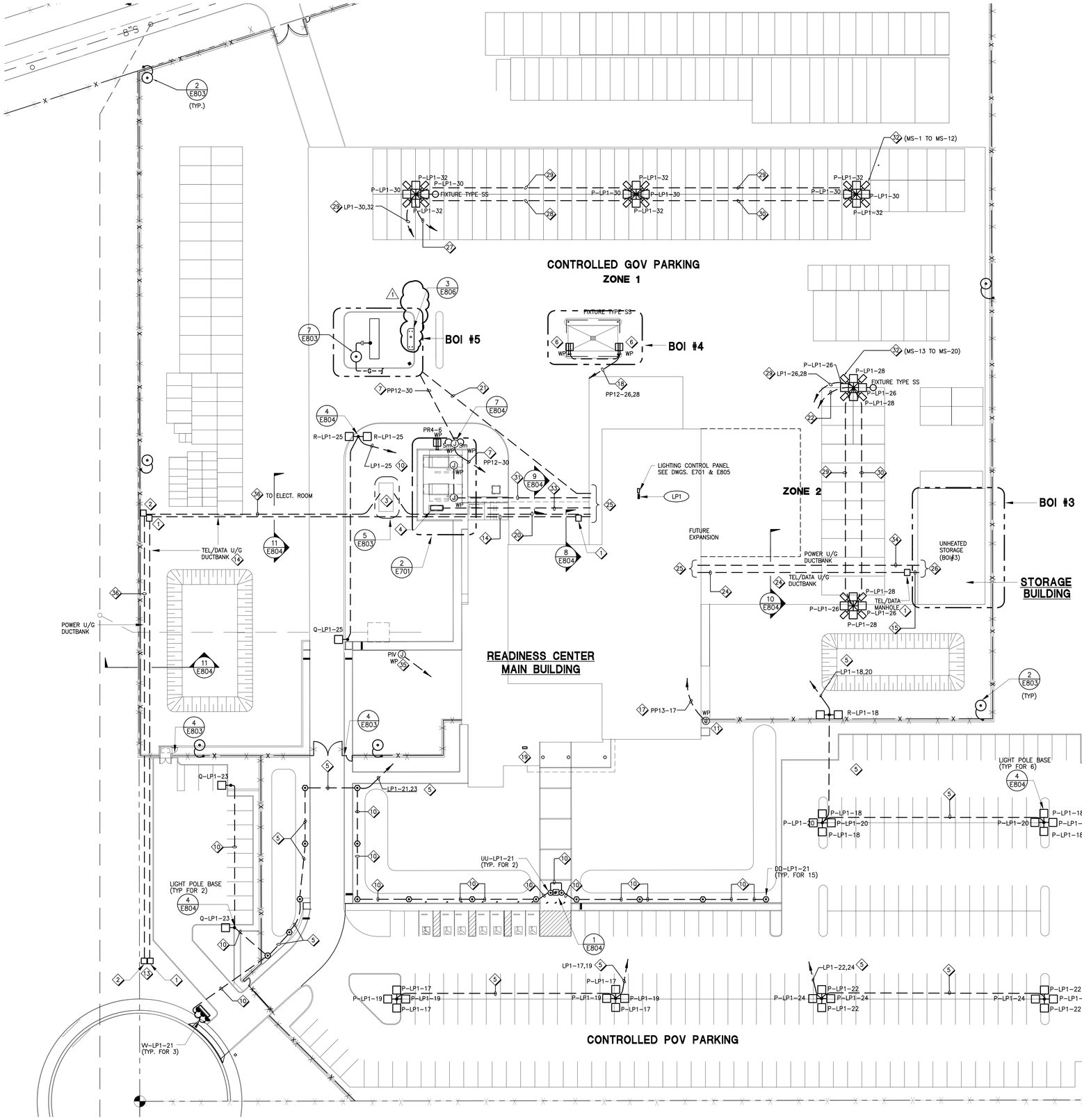
Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
ELECTRICAL
480 V MCC
SINGLE LINE DIAGRAM

AM-02

Designed By: UL
Drawn By: JTR
Checked By: AH

Drawing No.
E003



KEY NOTES

1. PROVIDE 3'-0" X 5'-0" X 3'-0" DEEP MANHOLE, JENSEN #K5106-FM78-14 OR APPROVED EQUAL.
2. PROVIDE NEW POWER MANHOLE 4'-0" X 6'-6" X 5'-6" DEEP, JENSEN #K466-DM66-11A OR APPROVED EQUAL.
3. 1000 KVA, 12.47 KV-480/277V, 3 PH., 4W PAD-MOUNTED TRANSFORMER PROVIDED AND INSTALLED BY SCE.
4. 80KW, 480/277V, 3 PH., 4W STANDBY GENERATOR.(BOI #11)
5. 1"C-3#8 & 1#10 GND
6. VERIFY EXACT RECEPTACLE LOCATION PRIOR TO ROUGH-IN.
7. 1"C-3#10, 1#10 GND.
8. NOT USED.
9. 3/4"C-2#12 & 1#12 GND
10. 1"C-2#8 & 1#10 GND
11. PROVIDE SURFACE MOUNTED WEATHERPROOF JUNCTION BOX AND CONNECTION TO IRRIGATION CONTROLLER. FIELD VERIFY EXACT LOCATION.
12. PROVIDE WEATHERPROOF JUNCTION BOX AND CONNECTION TO PIV. PROVIDE 3/4"C WITH REQUIRED CONDUCTORS BACK TO FIRE ALARM PANEL.
13. COORDINATE WITH CITY CIVIL DRAWINGS FOR MANHOLE LOCATIONS TO INTERCEPT UTILITY LINES.
14. (2)4"C.O. AND (2) 4"C.O. SPARE, PVC SCHEDULE 40.
15. (1)4"C WITH (1)50 PAIR FILLED CORE OUTSIDE PLANT CABLE, AND (1)50/125 MICRON 6-STRAND OPTICAL FIBER CABLE. (1)4"C.O. CAPPED AS "SPARE".
16. 3/4"C-2#10 & 1#10 GND
17. 3/4"C-2#12 & 1#12 GND
18. 3/4"C-3#12 & 1#12 GND
19. FIRE ALARM CONTROL PANEL "FACP". FOR EXACT LOCATION, SEE SHEET E511.
20. (3) 4"C-4#500KCMIL, 1#4/0 KCMIL GND. (1) 4"C.O. SPARE.
21. PROVIDE 2" C.O., INSTALL 30" TO 36" BELOW GRADE.
22. 1 1/4"C-38#14 (FOR MOTION SENSOR, STROBE LIGHT, (4) SPARES).
23. INDICATES COVERAGE FOR ONE MOTION SENSOR.
24. (1)4"C WITH (1)50 PAIR FILLED CORE OUTSIDE PLANT CABLE AND (1)50/125 MICRON 6-STRAND OPTICAL FIBER CABLE. (1)4"C.O. SPARE. FROM MPOE ROOM TO IT ROOM IN UNHEATED STORAGE BLDG. CABLES ARE B.O.I.
25. FOR CONTINUATION, SEE SHEET E700 AND E701.
26. FOR CONTINUATION, SEE SHEET E700 AND E702.
27. 1 1/2"C-54#14(FOR MOTION SENSOR, STROBE LIGHT, (4) SPARES).
28. 1 1/4"C-36#14(FOR MOTION SENSOR, (4) SPARES).
29. 1"C-3#8, 1#10 GND
30. 1"C-20#14(FOR MOTION SENSOR, (4) SPARES).
31. 1"C.O. FOR MECHANICAL CONTROL TO MAIN D.D.C. CONTROL PANEL IN ROOM 1118.
32. PROVIDE POLE MOUNTED MOTION SENSOR, PROTECH MODEL NO. SDI-77XL2., OR APPROVED EQUAL.
33. 2"C-4#1/0 & 1#6 GND
34. 1 1/2"C-4#1 & 1#8 GND
35. PROVIDE WEATHER PROOF JUNCTION BOX AND CONNECTION TO PIV. PROVIDE 3/4"C WITH REQUIRED CONDUCTORS BACK TO FIRE ALARM PANEL.
36. (1) 4"C.O. PVC SCHEDULE 40.

GENERAL NOTES

1. SEE DWG. E001 FOR SYMBOLS AND ABBREVIATIONS.
2. SEE DWGS E002 & E003 FOR SINGLE LINE DIAGRAMS.
3. SEE DWG. E801 FOR LIGHTING FIXTURE SCHEDULE.
4. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND WORK/MATERIAL REQUIREMENTS AND CONSTRUCT TO UTILITY COMPANY PLANS AND SPECIFICATIONS ONLY. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULL WIRES, CABLES, PULLBOXES, CONCRETE ENCASED OF CONCRETE ENCASED OF CONDUIT (IF REQUIRED), XFMR PAD, BARRIER'S, POLE RISERS, TRENCHING/BACKFILL AND UTILITY COMPANY FEES AS REQUESTED BY UTILITY COMPANY AND INCLUDE ALL REQUIREMENTS IN BID AND SCOPE OF WORK.
5. ALL POWER, TELECOMMUNICATION LIGHTING AND OTHER UNDERGROUND DUCTBANK OR CONDUIT AT PARALLEL RUN AND AT CROSSINGS SHALL MAINTAIN 12" SEPARATION OR CLEARANCE BELOW.

1 ELECTRICAL SITE PLAN
SCALE: 1"=30'-0"

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

REGISTERED PROFESSIONAL ENGINEER
DON T. PASTRANA
No. 13274
EXP. 3-31-06
ELECTRICAL
STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

ARMY NATIONAL GUARD

Keyplan:

Scale:
0 30' 60' 90'
SCALE: 1"=30'

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

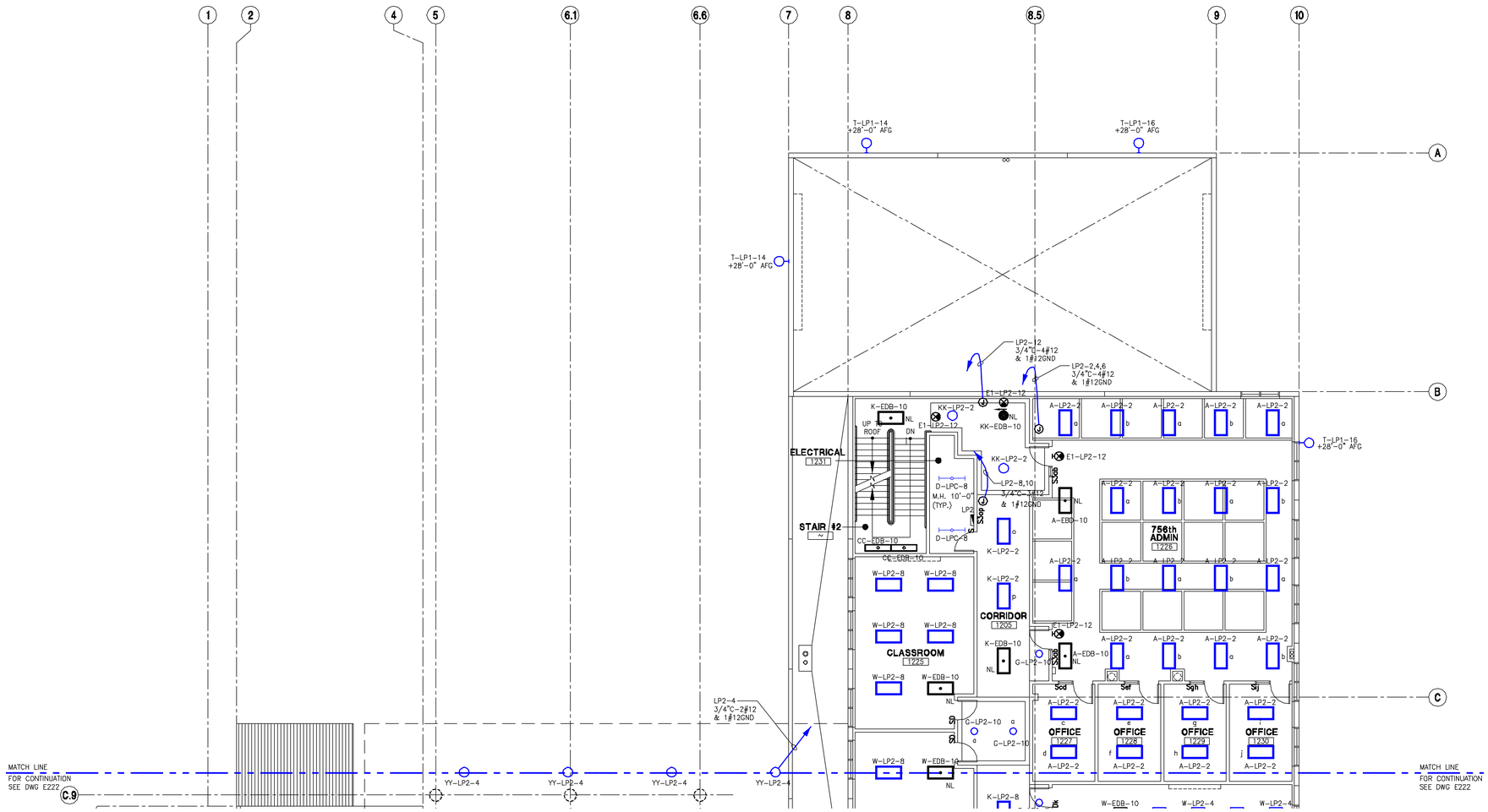
Drawing Title:
ELECTRICAL SITE PLAN

AM-02

Designed By: UL
Drawn By: JTR
Checked By: AH

Drawing No.
E100

USER NAME: cdburn
PLOT DATE: 08/31/2004 - 9:51AM
FILENAME: P:\F1W15401\700CADD\103ELECT\1541E100.dwg



KEY NOTES

1. NOT USED.

GENERAL NOTES

1. SEE DWG. E001 FOR SYMBOLS AND ABBREVIATIONS.
2. SEE DWG. E801 FOR LIGHTING FIXTURE SCHEDULE.
3. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR ALL EQUIPMENT ON THE CEILING.
4. DRAWINGS INDICATE HOMERUN WIRING AND CONDUIT ONLY. ALL INTERCONNECTION WIRING AND CONDUIT SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR AS INDICATED BY DEVICE CIRCUIT NUMBER.

1 **SECOND FLOOR AND LOWER ROOF PLAN - SECTOR 2**
SCALE: 1/8"=1'-0"

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

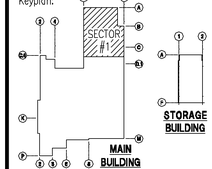
REGISTERED PROFESSIONAL ENGINEER
DON T. PASTRANA
No. 13274
EXP. 3-31-06
ELECTRICAL
STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

Keyplan:



Scale:
0 8' 16' 24'
SCALE: 1/8"=1'-0"

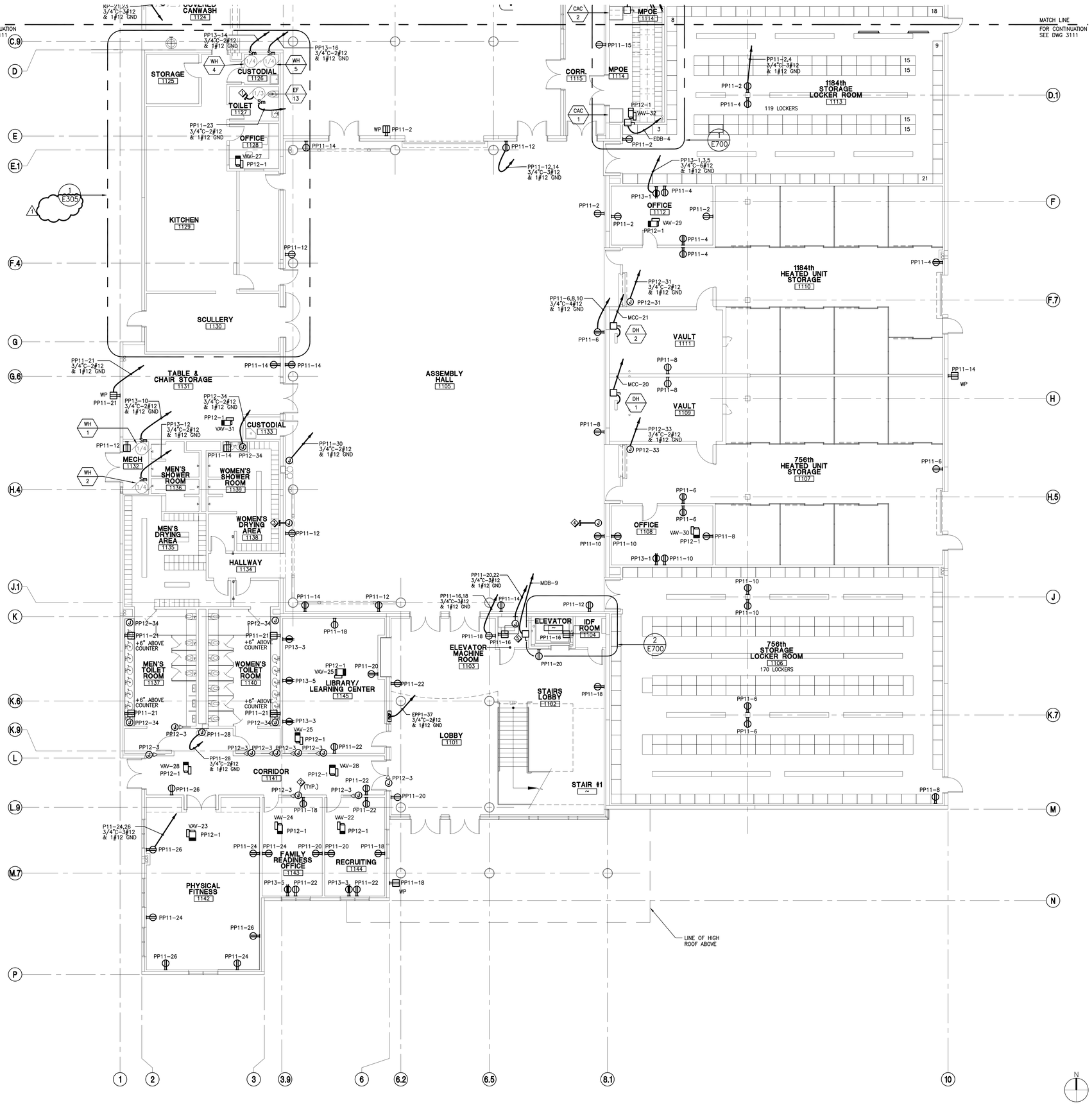
Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
ELECTRICAL
SECOND FLOOR PLAN
SECTOR 1
LIGHTING PLAN
AM-02

Designed By: UL
Drawn By: JTR
Checked By: AH

Drawing No.
E221

USER NAME: ALee
PLOT DATE: 08/31/2004 - 9:07AM
FILENAME: P:\F1W15401\CADD\DGN\ELECT\1541E221.dwg



KEY NOTES

1. PROVIDE 277V, FORM "C" RELAY IN NEMA 1 ENCLOSURE SQUARE "D" OR APPROVED EQUAL FOR INTERLOCK OPERATION OF LIGHTING AND EXHAUST FAN. EXHAUST FAN TO TURN ON WHEN LIGHTS ARE ON. MOUNT RELAY NEAR CONTROL SWITCH. SEE MECHANICAL DWG. M704 FOR CONTROL WIRING.
2. PROVIDE 120VAC POWER TO FIRE SMOKE DAMPER (TYP.). FOR EXACT LOCATION. REFER TO MECHANICAL DRAWING, M212.
3. PROVIDE JUNCTION BOX AND 3/4"C.O. FROM PRESSURE SENSOR TO AHU-4.
4. PROVIDE JUNCTION BOX AND 3/4"C.O. FROM PRESSURE SENSOR TO AHU-3.
5. PROVIDE 600V, 60A, 3P DISCONNECT SWITCH FOR ELEVATOR POWER.

GENERAL NOTES

1. FOR GENERAL NOTES, SEE DRAWING E11.
2. PROVIDE 3/4" C.O. FROM TEMPERATURE SENSORS TO DIRECT DIGITAL CONTROL. WIRING AND TERMINATIONS BY MECHANICAL. SEE 1/E805 AND MECHANICAL DRAWINGS M211, M212, M221 AND M222 FOR EXACT LOCATION OF TEMPERATURE SENSORS.

1 FIRST FLOOR PLAN - SECTOR 2
SCALE: 1/8"=1'-0"

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: cdburn
PLOT DATE: 08/31/2004 - 9:12AM
FILENAME: P:\F1W15401\700CADD\700ELECT\1541E312.dwg

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

REGISTERED PROFESSIONAL ENGINEER
DON T. PASTRAMA
No. 13274
EXP. 3-31-06
ELECTRICAL
STATE OF CALIFORNIA

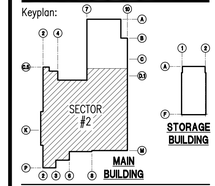
Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

ARMY NATIONAL GUARD

Keyplan:



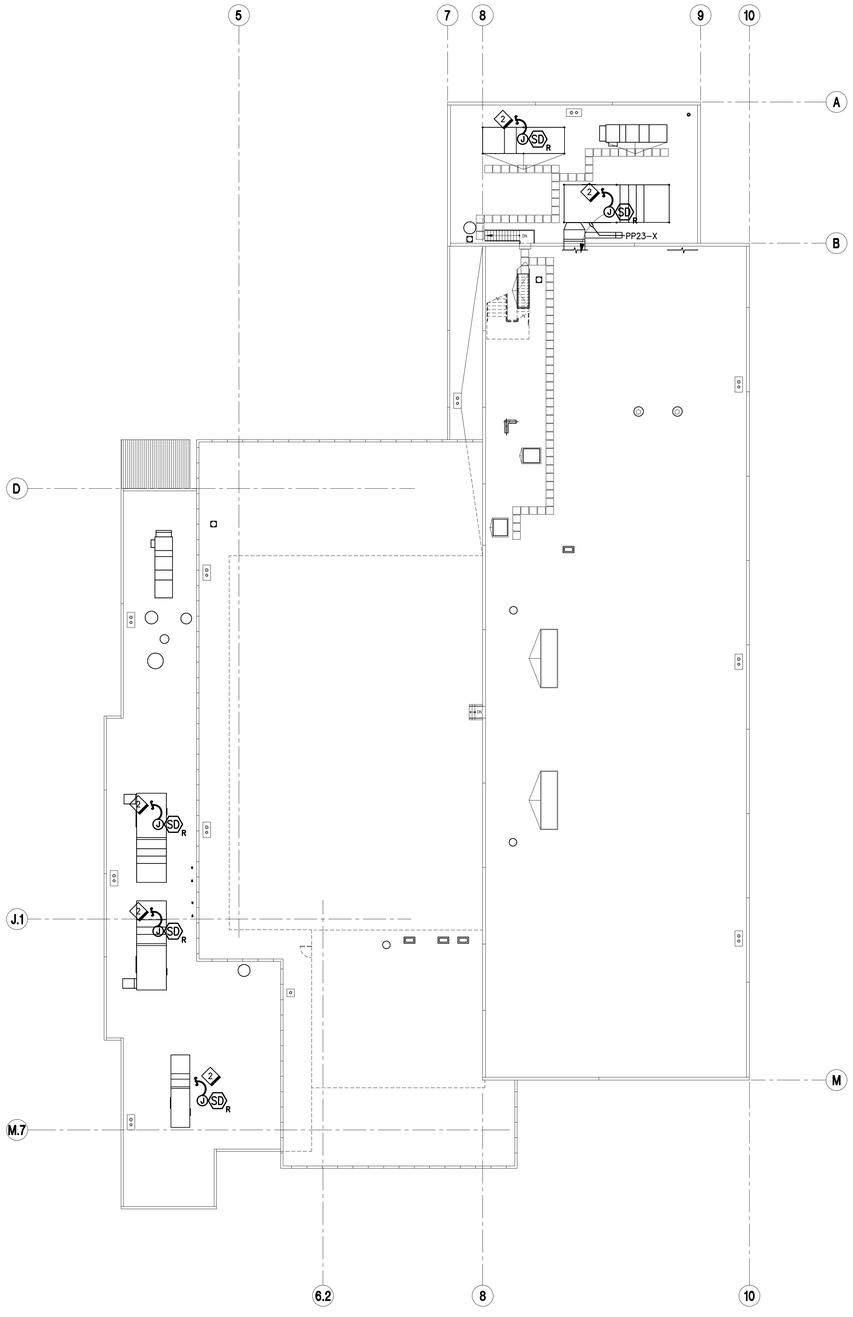
Scale:
0 8' 16' 24'
SCALE: 1/8"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
ELECTRICAL
FIRST FLOOR
SECTOR 2
POWER PLAN
AM-02

Designed By: UL
Drawn By: JTR
Checked By: AH

Drawing No.
E312



1 **ROOF FIRE ALARM PLAN**
SCALE: 1/16"=1'-0"

KEY NOTES

1. NOT USED.
2. CONNECT TO FIRE/SMOKE DAMPER. PROVIDE SMOKE DUCT DETECTOR IMMEDIATELY UPSTREAM OF FIRE SMOKE DAMPER.

GENERAL NOTES

1. SEE DWG. E001 FOR SYMBOLS AND ABBREVIATIONS.
2. SEE DWG. E503 FOR FIRE ALARM RISER DIAGRAM.

N

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

REGISTERED PROFESSIONAL ENGINEER
DON T. PASTRANA
No. 13274
EXP. 3-31-06
ELECTRICAL
STATE OF CALIFORNIA

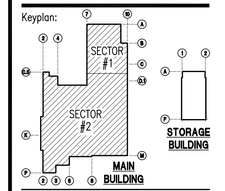
Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

ARMY NATIONAL GUARD

Keyplan:



Scale:
0 8' 16' 24' 32' 40'
SCALE: 1/16"=1'-0"

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
ELECTRICAL
ROOF
FIRE ALARM PLAN

AM-02

Designed By: UL
Drawn By: JTR
Checked By: AH

Drawing No.
E530

USER NAME: cdburn
PLOT DATE: 08/31/2004 - 9:13AM
FILENAME: P:\F1W15401\700CADD\70SELECT\1541E530.dwg

FL=FLUORESCENT
IN=INCANDESCENT
HPS=HIGH PRESSURE SODIUM
MH=METAL HALIDE

LIGHTING FIXTURE SCHEDULE

S=SURFACE
R=RECESSED
C=CHAIN
PL=POLE
P=PENDANT

TYPE	MANUFACTURER	CATALOG NO.	ALTERNATE MANUFACTURERS	CORP STANDARD DETAIL No. 40-06-04	FIXTURE DESCRIPTION	LAMPS TYP	LAMPS DESCRIPTION	LAMPS QTY.	VOLT	FIXT. INPUT	MTG	REMARKS
A	LITHONIA	2PM3N GB3 32 18 LD 277 GEB	COLUMBIA H.E. WILLIAMS	TYPE R	RECESSED 2'x4' 3-LAMP PARABOLIC TROFFER WITH 18 CELL LOUVER IN T-BAR CEILING	FL	F032 T8/35K	3	277	90	R	
B	LITHONIA	2PM3N GB2 32 12 LD 277 GEB	COLUMBIA H.E. WILLIAMS	– –	RECESSED 2'x4' 2-LAMP PARABOLIC TROFFER WITH 12 CELL LOUVER IN T-BAR CEILING	FL	F032 T8/35K	2	277	58	R	
C	LITHONIA	2PM3N GB2 U31 6 LD 277 GEB	COLUMBIA H.E. WILLIAMS	TYPE SF7	RECESSED 2'x2' 2-LAMP PARABOLIC TROFFER WITH 6 CELL LOUVER IN T-BAR CEILING	FL	F032 T8/35K	2	277	58	R	
D	LITHONIA	AF10 232 277 GEB	COLUMBIA H.E. WILLIAMS	TYPE A	4' LONG 2-LAMP INDUSTRIAL STRIP FIXTURE WITH SEISMIC RESTRAINT	FL	F032 T8/35K	2	277	58	S	
E1	LITHONIA	LESW-1G-277-ELN	SRBT ISOLITE	TYPE XLI	LED WITH NICKEL CADMIUM BATTERY	LED	–	–	–	–	S	WALL MOUNT @ +7'-6"
E2	LITHONIA	LESW-2G-277-ELN	SRBT ISOLITE	TYPE XLI	LED WITH NICKEL CADMIUM BATTERY	LED	–	–	–	–	S	WALL MOUNT @ +7'-6"
F	SPORTLITE	LX8-T42-35K-22LEXCP-22ILLP-277-2SL-3PEN	GUTH RUUD	– –	ENERGY EFFICIENT 8-LAMP FLUORESCENT HIGH BAY LIGHT FIXTURE	FL	42W GX24 Q4 35K	8	277	376	P	WITH 2-LEVEL SWITCHING
G	INTENSE	IFV826-E-27-I100-ICH-188C	LITHONIA COLUMBIA	TYPE RF5	RECESSED 8" FLUORESCENT DOWN LIGHT	FL	26W 35K	1	277	32	R	
H	LITHONIA	SS2-32-277-GEB	COLUMBIA H.E. WILLIAMS	– –	FLUORESCENT 4' LONG 2-LAMP STAGGERED STRIP FIXTURE MOUNTED WITHIN COVE	FL	F032 T8/35K	2	277	58	S	
J	LITHONIA	2SP8-G332-A12-277-GEB	COLUMBIA H.E. WILLIAMS	TYPE D	RECESSED 2'x4' 3-LAMP LENSED TROFFER WITH PRISMATIC ACRYLIC LENS	FL	F032 T8/35K	3	277	90	R	
K	LITHONIA	2SP8-G232-A12-277-GEB	COLUMBIA H.E. WILLIAMS	TYPE C	RECESSED 2'x4' 2-LAMP LENSED TROFFER WITH PRISMATIC ACRYLIC LENS	FL	F032 T8/35K	2	277	58	R	
L	LITHONIA	UN323-277-GEB	COLUMBIA H.E. WILLIAMS	TYPE SF10	FLUORESCENT 4' LONG 2-LAMP STRIP FIXTURE	FL	F032 T8/35K	2	277	58	S	
M	LITHONIA	DM232-277-GEB	COLUMBIA H.E. WILLIAMS	TYPE PF9	ENCLOSED 4' LONG 2-LAMP FLUORESCENT DAMP LOCATION FIXTURE	FL	F032 T8/35K	2	277	58	S	
N	SPORTLITE	LX4-T42-35K 22LEXCP-277-2SL-3PEN	GUTH RUUD	– –	ENERGY EFFICIENT 4-LAMP FLOUR. HIGH BAY LIGHT FIXTURE	FL	42W GX24 Q4 35K	4	277	188	P	WITH 2-LEVEL SWITCHING
P	INVUE	AEM-400-HPS-277-4S-BZ	HOLOPHANE GENERAL ELECTRIC LIGHTING	TYPE EH1	POLE MOUNTED CUTOFF TYPE FIXTURE WITH ALUMINUM HOUSING, BRONZE FINISH AND 30' HIGH SQUARE STRAIGHT ALUMINUM POLE	HPS	400W HPS	4	277	1860	PL	POLE MOUNTED ON CONCRETE PEDESTAL
Q	INVUE	AEM-400-HPS-277-2S-BZ	HOLOPHANE GENERAL ELECTRIC LIGHTING	TYPE EH1	POLE MOUNTED CUTOFF TYPE FIXTURE WITH ALUMINUM HOUSING, BRONZE FINISH AND 30' HIGH SQUARE STRAIGHT ALUMINUM POLE	HPS	400W HPS	1	277	465	PL	POLE MOUNTED ON CONCRETE PEDESTAL
R	INVUE	AEM-400-HPS-277-SL-BZ	HOLOPHANE GENERAL ELECTRIC LIGHTING	TYPE EH1	POLE MOUNTED CUTOFF TYPE FIXTURE WITH ALUMINUM HOUSING, BRONZE FINISH AND 30' HIGH SQUARE STRAIGHT ALUMINUM POLE	HPS	400W HPS	2	277	930	PL	POLE MOUNTED ON CONCRETE PEDESTAL
S	INTENSE	IFH9-242-E-27-I100-IC910-C	LITHONIA COLUMBIA	– –	RECESSED 9" FLUORESCENT, 2-LAMP DOWNLIGHT	FL	42W 4-PIN	2	277	94	R	
T	LITHONIA	WFL3-400S-RN-277-DWH	HOLOPHANE GENERAL ELECTRIC LIGHTING	– –	FLOODLIGHT WITH ALUMINUM HOUSING	HPS	400W HPS	1	277	465	S	COLOR TO BE SELECTED BY CONTRACTING OFFICER'S REPRESENTATIVE 1
U	NOT USED											
V	LITHONIA	TXC400MA23277	HOLOPHANE GENERAL ELECTRIC LIGHTING	TYPE PH7	ENCLOSED METAL HALIDE HIGH BAY	MH	400W MH	1	277	465	P	PENDANT MOUNTED AT +16'-0" AFF
W	LITHONIA	2PM3N-GB3-32-18-LD-277 ADVANCE DIMMING BALLAST	COLUMBIA H.E. WILLIAMS	TYPE R	RECESSED 2'x4' 3-LAMP PARABOLIC TROFFER WITH 18 CELL LOUVER, DIMMING BALLAST IN T-BAR CEILING	FL	F032 T8/35K	3	277	90	R	
X	LITHONIA	AW232277 GEB	COLUMBIA H.E. WILLIAMS	TYPE SF4	1'x4' 2-LAMP FLUORESCENT, WRAP AROUND LENSED FIXTURE	FL	F032 T8/35K	2	277	58	S	
Y	LITHONIA	AW332277 GEB	COLUMBIA H.E. WILLIAMS	TYPE B	1'x4' 3-LAMP FLUORESCENT, WRAP AROUND LENSED FIXTURE	FL	F032 T8/35K	3	277	87	S	
Z	LITHONIA	SS1-32-277-GEB	COLUMBIA H.E. WILLIAMS	– –	FLUORESCENT 4' LONG 1-LAMP STAGGERED STRIP FIXTURE MOUNTED WITHIN COVE	FL	F032 T8/35K	1	277	38	S	

FL=FLUORESCENT
IN=INCANDESCENT
HPS=HIGH PRESSURE SODIUM
MH=METAL HALIDE

LIGHTING FIXTURE SCHEDULE (CONTINUATION)

S=SURFACE
R=RECESSED
C=CHAIN
PL=POLE
P=PENDANT

TYPE	MANUFACTURER	CATALOG NO.	ALTERNATE MANUFACTURERS	CORP STANDARD DETAIL No. 40-06-04	FIXTURE DESCRIPTION	LAMPS TYP	LAMPS DESCRIPTION	LAMPS QTY.	VOLT	FIXT. INPUT	MTG	REMARKS
AA	BASELITE	GLGUW-1	CROUSE-HINDS GENERAL ELECTRIC LIGHTING	TYPE –	VAPORTIGHT INCANDESCENT JAR TYPE FIXTURE	IN	100W A-19 130V	1	120	100	S	MOUNT AS DIRECTED BY ELEV. MANUFACTURER
BB	LITHONIA	ELT50-HO12	DUALITE SILTRON	TYPE K	EMERGENCY LIGHTING UNIT WITH STEEL HOUSING	IN	20W HALOGEN	2	277	20	S	MOUNT AT +10'-0" AFF
CC	LOUIS POULSEN	CRP-MAX	OR EQUAL	– –	PENDANT LIGHTING FIXTURE	FL	18W CFQ	3	297	65	P	---
DD	LITHONIA	KBR6 70S R5 277 DWH	HOLOPHANE GENERAL ELECTRIC LIGHTING	TYPE EH11	42" H X 6" ROUND WALKWAY BOLLARD WITH WHITE FINISH	HPS	70W HPS	1	277	97	S	MOUNT ON CONCRETE BASE
EE	LITHONIA	WFL2 150SGZ 277 DNA	HOLOPHANE GENERAL ELECTRIC LIGHTING	TYPE EH8	ARCHITECTURAL ADJUSTABLE WALL-PAK WITH NATURAL ALUMINUM FINISH	HPS	150 HPS	1	277	175	S	WALL MOUNTED AT +18' HIGH
FF	LITHONIA	2PM3N GB3 32 18 LD 277 GEB EL14	COLUMBIA H.E. WILLIAMS	TYPE R	RECESSED 2'x4' 3-LAMP PARABOLIC TROFFER WITH 18 CELL LOUVER IN T-BAR CEILING	FL	F032 T8/35K	3	277	90	R	WITH EMERG. BATTERY PACK
GG	LITHONIA	2PM3N GB2 32 12 LD 277 GEB EL14	COLUMBIA H.E. WILLIAMS	– –	RECESSED 2'x4' 2-LAMP PARABOLIC TROFFER WITH 12 CELL LOUVER IN T-BAR CEILING	FL	F032 T8/35K	2	277	58	R	WITH EMERG. BATTERY PACK
HH	LITHONIA	AF10 232 277 GEB EL14	COLUMBIA H.E. WILLIAMS	TYPE A	4' LONG 2-LAMP INDUSTRIAL STRIP FIXTURE WITH SEISMIC RESTRAINT	FL	F032 T8/35K	2	277	58	S	WITH EMERG. BATTERY PACK
JJ	SPORTLITE	LX8-T42-35K-22LEXCP-277-3PEN-EP30	GUTH RUUD	– –	ENERGY EFFICIENT 8-LAMP FLUORESCENT HIGH BAY LIGHT FIXTURE	FL	42W GX24 Q4 35K	8	277	376	P	WITH EMERG. BATTERY PACK – UNSWITCHED
KK	INTENSE	IFV826-E-27-I100-ICH-188C-EM	LITHONIA COLUMBIA	TYPE RF5	RECESSED 8" FLUORESCENT DOWN LIGHT	FL	26W 35K	1	277	32	R	WITH EMERG. BATTERY PACK
LL	LITHONIA	2SP8-G232-A12-277-GEB-EL14	COLUMBIA H.E. WILLIAMS	TYPE C	RECESSED 2'x4' 2-LAMP LENSED TROFFER WITH PRISMATIC ACRYLIC LENS	FL	F032 T8/35K	2	277	58	R	WITH EMERG. BATTERY PACK
MM	SPORTLITE	LX4-T42-35K 22LEXCP-277-3PEN-EP30	GUTH RUUD	– –	ENERGY EFFICIENT 4-LAMP FLOUR. HIGH BAY LIGHT FIXTURE	FL	42W GX24 Q4 35K	4	277	188	P	WITH EMERG. BATTERY PACK –UNSWITCHED
NN	INTENSE	IFH9-242-E-27-I100-IC910-C-EM	LITHONIA COLUMBIA	– –	RECESSED 9" FLUORESCENT, 2-LAMP DOWNLIGHT	FL	42W 4-PIN	2	277	94	R	WITH EMERG. BATTERY PACK
PP	LITHONIA	AW332277 GEB EL14	COLUMBIA H.E. WILLIAMS	TYPE B	1'x4' 3-LAMP FLUORESCENT, WRAP AROUND LENSED FIXTURE	FL	F032 T8/35K	3	277	87	S	WITH EMERG. BATTERY PACK
QQ	LITHONIA	TWN-1008-277	OR EQUAL	–	WALL=PARK DIE CAST ALUMINUM	HPS	70 HPS	1	277	58	S	---
RR	LITHONIA	AW232277 GEB EL14	COLUMBIA H.E. WILLIAMS	TYPE SF4	1'x4' 2-LAMP FLUORESCENT, WRAP AROUND LENSED FIXTURE	FL	F032 T8/35K	2	277	58	S	EXCEPT WITH EMERG. BATTERY PACK
SS	CROUSE-HINDS	VDAS/A/024	EDWARDS FEDERAL SIGNAL	– –	6" DIA X 9"H STROBE LIGHT WITH LENS DOME OUTDOOR	ST	STROBE TUBE	1	24 VDC	40	PL	---
TT	VISA	CB5100-F3CL	OR EQUAL	– –	WALL MOUNTED LIGHTING FIXTURE	FL	36W	1	277	40	S	---
UU	KIM	LTV710SP	LITHONIA	– –	INGRADE LIGHTING FIXTURE	MH	150W	1	277	175	S	---
VV	KIM	CFL	LITHONIA	– –	SIGN LIGHTING	HPS	70W	1	277	87	S	---
WW	LITHONIA	AH175M ATZ 277	COLUMBIA H.E. WILLIAMS	TYPE RH5	RECESSED 12" DOWNLIGHT	MH	175W	1	277	195	R	---
XX	VISA	CB5110-2F13 (277)-*-BA	LITHONIA COLUMBIA	TYPE WF2	WALL MOUNTED LIGHTING FIXTURE	FL	13W	2	277	35	S	METALLIC SILVER
YY	COLE	2512R-N-556-HD-W-277	OR EQUAL	TYPE RH5	CEILING MOUNTED LIGHTING FIXTURE	MH	150W	1	277	175	R	---
ZZ	BARTCO	BFL255-32-277	OR EQUAL	– –	4' – 1 LAMP LOW PROFILE FLUORESCENT LIGHTING FIXTURE	FL	32W	1	277	38	S	---
AAA	LITHONIA	WFL2-150S-RN-277-DWH	HOLOPHANE GENERAL ELECTRIC LIGHTING	– –	FLOODLIGHT WITH ALUMINUM HOUSING	HPS	150W HPS	1	277	190	S	COLOR TO BE SELECTED BY CONTRACTING OFFICER'S REPRESENTATIVE 1

JACOBS
LOS ANGELES OPERATIONS
5757 Plaza Drive, Suite 100, Cypress CA. 90630
(714) 503-3400 FAX (714) 503-3999

Seal:

REGISTERED PROFESSIONAL ENGINEER
DON T. PASTRAM
No. 13274
EXP. 3-31-06
ELECTRICAL
STATE OF CALIFORNIA

Revision:

No.	Date	By	Description
0	07/23/04		100% SUBMITTAL
1	08/31/04		AMENDMENT #2

CALIFORNIA ARMY NATIONAL GUARD
LANCASTER READINESS CENTER
CITY OF LANCASTER, LOS ANGELES CO. CA.

ARMY NATIONAL GUARD

Keyplan:

Scale:

Jacobs Project No.: F1W15401
ARNG Project No.: 060297

Drawing Title:
ELECTRICAL LIGHTING FIXTURE SCHEDULE

AM-02

Designed By: UL
Drawn By: JTR
Checked By: AH

Drawing No.
E801

MODIFIED FOR SITE ADAPTATION AT
LANCASTER READINESS CENTER
DRAWING FILE. NO. 200-25-153
DEPT. SPEC. NO. 1406

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

USER NAME: cdburn
PLOT DATE: 08/31/2004 - 9:14AM
FILENAME: P:\F1W15401\700CADD\703ELEC\1541E801.dwg